COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
TIDEWATER REGIONAL OFFICE
5636 Southern Boulevard, Virginia Beach, Virginia 23462
(757) 518-2000 Fax (757) 518-2009
www.deq.virginia.gov

Preston Bryant
Secretary of Natural Resources

David K. Paylor
Director

Francis L. Daniel
Regional Director

September 9, 2009

Jeannine M. Siembida
Mill Manager
International Paper - Franklin Mill
34040 Union Camp Drive
Franklin, VA 23851

Location: Isle of Wight
Registration No: 60214
AFS Id. No.: 51-093-00006

Dear Ms. Siembida:

Attached is a permit to operate your Kraft Pulp and Paper Mill pursuant to 9 VAC 5 Chapter 80 of the Virginia Regulations for the Control and Abatement of Air Pollution. This permit incorporates provisions from the FESOP permit dated August 12, 2009.

The permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and civil penalty. Please read all permit conditions carefully.

In evaluating the application and arriving at a final decision to issue this permit, the Department deemed the application complete on August 20, 2008, and solicited written public comments by placing a newspaper advertisement in the Tidewater News on July 12, 2009. The thirty day comment period (provided for in 9 VAC 5-80-270) expired on August 11, 2009, with no comments having been received in this office.

This approval to operate does not relieve International Paper - Franklin Mill of the responsibility to comply with all other local, state, and federal permit regulations.

Issuance of this permit is a case decision. The Regulations, at 9 VAC 5-170-200, provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this permit is mailed or delivered to you. Please consult that and other relevant provisions for additional requirements for such requests.

Additionally, as provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal to court by filing a Notice of Appeal with:

David K. Paylor, Director
Department of Environmental Quality
P. O. Box 1105
Richmond, VA 23218-1105

In the event that you receive this permit by mail, three days are added to the period in which to file an appeal. Please refer to Rule 2A of the Rules of the Supreme Court of Virginia for additional information including filing dates and the required content of the Notice of Appeal.

If you have any questions concerning this permit, please contact Laura D. Corl at 757-518-2178 or by e-mail at laura.corl@deq.virginia.gov.

Sincerely,

Jane A. Workman
Air Permit Manager

jaw/ldc/60214_024_09_TVrenewalcvrltr.doc

Attachment: Permit

cc: Director, OAPP (electronic file submission)
Manager, Data Analysis (electronic file submission)
Chief, Air Enforcement Branch (3AP12), U.S. EPA, Region III
Compliance Manager/Inspector (hard copy)

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Federal Operating Permit
Article 3

This permit is based upon Federal Clean Air Act acid rain permitting requirements of Title IV, federal operating permit requirements of Title V; and Chapter 80, Article 3 and Chapter 140 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13: 10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, 9 VAC 5-80-360 through 9 VAC 5-80-700, and 9 VAC 5-140-10 through 9 VAC 5-140-900 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	International Paper - Franklin Mill
Facility Name:	International Paper - Franklin Mill
Facility Location:	34040 Union Camp Drive Franklin, Virginia 23851
Permit Number:	**TRO-60214**
AFS Number:	51-093-00006

This permit includes the following programs:

Federally Enforceable Requirements - Clean Air Act (Sections I through XIV)
Federally Enforceable Requirements - CAIR (Sections XV)
State Only Enforceable Requirements (Section XVI)

October 1, 2009
Effective Date

December 31, 2013
Expiration Date

Francis L. Daniel

September 9, 2009
Signature Date

Table of Contents

I. Facility Information

Permittee
International Paper - Franklin Mill
34040 Union Camp Drive
Franklin, VA 23851

Responsible Official
Jeannine M. Siembida
Mill Manager

NO_x Budget Trading Authorized Account Representative
Jeannine M. Siembida
Mill Manager

NO_x Budget Trading Alternate Authorized Account Representative
Sheryl Raulston
EHS Manager

Facility Contact Person
Sheryl Raulston
EHS Manager
(757) 569-4558

AFS Identification Number: 51-093-00006
ORIS Code and/or EIA Facility ID: 52152

Facility Description: NAICS 322121 - Pulp Mill (SIC 2611); NAICS 322121 - Paper Mill (SIC 2621); NAICS 322130 - Paperboard Mill (SIC 2631); NAICS 322211 - Converted Paper and Paperboard Products (SIC 2679)

This facility produces finished paper and paperboard products, virgin and recycled pulp and recycled paper products from logs and chips using the Kraft process. They also produce turpentine. The mill has the capability of generating most of the power used at this mill.

There are 10 major parts of this facility as listed in the application: 1) the Wood Yard process area; 2) the Unbleached Pulp Mill process area; 3) the Caustic Recovery process area; 4) the Chemical Recovery process area; 5) the Bleach Plant process area; 6) the Paper Machine process area; 7) the Power House process area; 8) the Wastewater Treatment System process area; 9) the Fiber Recycling process area; and 10) Miscellaneous processes.

This facility is operating under a Federally Enforceable State Operating Permit dated March 31, 2006, which includes the Site Wide Emissions Cap conditions.

This facility will be complying with 40 CFR Part 63, Subpart S in a site-specific manner. This permit is the Equivalency Permit which was granted to the Department of Environmental Quality by EPA. On April 15, 2004, EPA published in the Federal Register an approval of an EBP (Equivalency by Permit) for the Virginia DEQ. This approval allows the Virginia DEQ to establish and enforce alternative state requirements for International Paper Franklin Mill in lieu of those in the Pulp and Paper MACT (40 CFR Part 63, Subpart S). The approval requires that the alternative requirements must be at least as stringent as the MACT.

This facility shall comply with 40 CFR 63.443(a)(1) by controlling the HAP emissions from the following equipment systems:

A. Each LVHC system

B. Each knotter or screen system with total HAP mass emission rates greater than or equal to the rates specified in 40 CFR 63.443(a)(1)(ii)(A) or (a)(1)(ii)(B) or the combined rate specified in 40 CFR 63.443(a)(1)(ii)(C)

C. D-Wash Line Washer and Accepts Tank

D. B-Decker and Filtrate Tank

E. No. 1 High Density Storage Tank

F. Nos. 1-4 BLOX Tank Vents

G. E-Bleach Line O_2–1 Washers and Filtrate Tank

H. E-Bleach Line O_2–2 Washers and Filtrate Tank

I. E-Bleach Line East and West Twin Roll Press

J. E-Bleach Line O_2 System Blow Tank, Blend Chest, and Pressate Level Tank

Note:

a. Emissions from the mill's knotter and screen systems are not required to be collected and controlled. These systems have been found to have HAP concentrations below the thresholds specified in 40 CFR 63.443(a)(1)(ii).

b. Emissions from the E-decker are not required to be collected and controlled since the HAP (as MeOH) content of the shower water used on this system was found to be less than the threshold specified in 40 CFR 63.443(a)(1)(iv)(B).

c. Emissions from the following systems (as defined in Appendix A) are not required to be collected and controlled under International Paper's alternative 40 CFR 63.443 compliance approach:

   i A & B Washer systems

   ii C Washer system

   iii D-Wash Line seal tank

   iv Vertical Foam Tank

   v Knotters and Screens

   vi E-Bleach Line oxygen delignification system O_2 reactor purge vent and pressate hold tank

   vii F-Bleach Line Oxygen Delignification System

This facility was granted a regulatory variance allowing DEQ to cap the emissions of 10 pollutants. The variance also waives the requirement for minor or major source permitting prior to construction projects at the facility. The site-specific regulation is 9 VAC 5 Chapter 230. The regulatory variance was passed in 2005 and the facility began operating under their cap on April 1, 2006.

This variance was part of a much bigger project known as the International Paper Environmental Innovations Project. The project included the alternative requirements for complying with the MACT (an equivalency by permit); the regulatory variance capping 10 pollutants and waiving NSR permitting requirements; and additional environmental improvement projects promised to be completed by the facility known as the 'Plus' projects. At this point in time, IP has completed all of the 'Plus' Projects. With the issuance of this permit, the No. 6 Recovery Boiler project has been completed and new rated capacities of several units have been incorporated into this permit. The emission testing after completing the project demonstrate a significant reduction in CO emissions when firing black liquor and additional reductions in PM, PM-10, and SO_2. There was a slight increase in the NO_x emissions as a result of the project.

II. Emission Units

Equipment to be operated consists of

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled
Wood Yard Process Area						
WDY01	N/A	**Traffic – Log Hauling (paved road)**	75,000 mi./yr	-	-	-
WDY02	N/A	**Traffic – Chip Hauling (paved road)**	50,000 mi./yr	-	-	-
WDY06	N/A	**Slashing Process**	2,000,000 tons/yr	-	-	-
WDY08	N/A	**Debarking/Chipping**	2,500,000 tons/yr	-	-	-
WDY14	N/A	**Wind Erosion – Fuel Chip Pile (Sawdust)**	N/A	-	-	-
WDY16	N/A	**Screening/Rechipping**	4,000,000 tons/yr	-	-	-
Unbleached Pulp Mill						
UPM01[(2)]	PWRSV03, PWRSV02	**Digester System (constructed 1969)**	57.9 ADT/hr	No. 6 or No. 7 Power Boiler and TRS Scrubber	PWR02, 03 CRECD07	TRS, VOC
	-	Batch Digesters 1-12	-	No. 6 or No. 7 Power Boiler and TRS Scrubber	PWR02, 03 CRECD07	TRS, VOC
	-	Blow Tanks A, B, C	-	No. 6 or No. 7 Power Boiler and TRS Scrubber	PWR02, 03 CRECD07	TRS, VOC
UPM02[(2)]	PWRSV01, PWRSV02	**Continuous Digester System**	(See below)	No. 6 or No. 7 Power Boiler and TRS Scrubber	PWR02, 03 CRECD07	TRS, VOC
		K1 Digester	45.8 ADT/hr	No. 6 or No. 7 Power Boiler and TRS Scrubber	PWR02, 03 CRECD07	TRS, VOC
		K2 Digester	35.4 ADT/hr	No. 6 or No. 7 Power Boiler and TRS Scrubber	PWR02, 03 CRECD07	TRS, VOC
UPM03	UPMSV03	**A Wash Line**	27 ADT/hr	-	-	-
	-	A1 Washer	-	-	-	-
	-	A2 Washer	-	-	-	-
	-	A3 Washer	-	-	-	-
	-	A1 Filtrate Tank	-	-	-	-
	-	A2 Filtrate Tank	-	-	-	-
	-	A3 Filtrate Tank	-	-	-	-
UPM04	UPMSV04	**B Wash Line**	22.9 ADT/hr	-	-	-
	-	B1 Washer	-	-	-	-
	-	B2 Washer	-	-	-	-
	-	B3 Washer	-	-	-	-
	-	B1 Filtrate Tank	-	-	-	-
	-	B2 Filtrate Tank	-	-	-	-
	-	B3 Filtrate Tank	-	-	-	-
UPM05	UPMSV05	**C Wash Line**	35.4 ADT/hr	-	-	-

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled
	-	C1 Washer	-	-	-	-
	-	C2 Washer	-	-	-	-
	-	C3 Washer	-	-	-	-
	-	C1 Filtrate Tank	-	-	-	-
	-	C2 Filtrate Tank	-	-	-	-
	-	C3 Filtrate TankA2 Washer	-	-	-	-
UPM06[2]	BLPSV12	**D Wash Line**	50 ADT/hr	RTO	BLP12	TRS, VOC, HAPs
	-	D Seal Tank	-	-	-	
		D Washer				
		D Wash Line Filtrate Tank				
	-	D Accepts Tank		RTO	BLP12	TRS, VOC, HAPs
UPM07	UPMSV07	**A Noss Screens**	27 ADT/hr	-	-	-
UPM08	UPMSV08	**B Noss Screens**	22.9 ADT/hr	-	-	-
UPM09	UPMSV09	**C Screens**	35.4 ADT/hr	-	-	-
	-	Primary Screens	-	-	-	-
	-	Secondary Screens	-	-	-	-
UPM10	UPMSV10	**D Screens**	50 ADT/hr	-	-	-
	-	Primary Screens	-	-	-	-
	-	Secondary Screens	-	-	-	-
	-	Tertiary Screens	-	-	-	-
UPM11[2]	UPMSV11	**B Decker**	50 ADT/hr	RTO	BLP12	TRS, VOC, HAPs
	BLPSV12	B Decker Filtrate Tank	-	RTO	BLP12	TRS, VOC, HAPs
UPM12	UPMSV12	**D Decker**	46.9 ADT/hr	-	-	-
	-	D Decker Filtrate Tank	-	-	-	-
UPM13	UPMSV13	**E Decker**	53.1 ADT/hr	-	-	-
	-	E Decker Filtrate Tank	-	-	-	-
UPM14	UPMSV14	**A Knotter**	27 ADT/hr	-	-	-
UPM15	UPMSV15	**B Knotter**	22.9 ADT/hr	-	-	-
UPM16	UPMSV16	**C Knotter**	46.9 ADT/hr	-	-	-
UPM17	UPMSV17	**D Knotter**	53.1 ADT/hr	-	-	-
UPM18	UPMSV18	**No. 7 Low Density Storage Tank**	8,760 hr/yr	-	-	-
UPM19[2]	PWRSV03, PWRSV02	**K1 & K2 Chip Bin Vents**	-	No. 6 or No. 7 Power Boiler	PWR02, 03	TRS, VOC
UPM20[2]	PWRSV03, PWRSV02	**Turpentine System**	180 gal/hr	No. 6 or No. 7 Power Boiler and TRS Scrubber	PWR02, 03 CRECD07	TRS, VOC

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled
	-	No.1 Storage Tank	-	No. 6 or No. 7 Power Boiler and TRS Scrubber	PWR02, 03 CRECD07	TRS, VOC
	-	Decanter	-	No. 6 or No. 7 Power Boiler and TRS Scrubber	PWR02, 03 CRECD07	TRS, VOC
	-	Decanter Underflow Tank	-	No. 6 or No. 7 Power Boiler and TRS Scrubber	PWR02, 03 CRECD07	TRS, VOC
	-	No.2 Storage Tank	-	No. 6 or No. 7 Power Boiler and TRS Scrubber	PWR02, 03 CRECD07	TRS, VOC
	-	Padding Water Collection Tank	-	No. 6 or No. 7 Power Boiler and TRS Scrubber	PWR02, 03 CRECD07	TRS, VOC
UPM21	UPMSV19	**Multiple Foam Tanks**	8,760 hr/yr	-	-	-
UPM26	-	**D Wash HVLC System Venting**	-	-	-	TRS,VOC, Methanol
UPM27[2]	UPMSV01	Blow Heat Accumulator	-	No. 6 or No. 7 Power Boiler and TRS Scrubber	PWR02, 03 CRECD07	TRS, VOC
UPM28[2]	-	D-Blow Tank	-	No. 6 or No. 7 Power Boiler and TRS Scrubber	PWR02, 03 CRECD07	TRS, VOC
UPM29	-	**K1 & K2 Chip Bin LVHC System Venting**	-	-	-	TRS,VOC, Methanol
UPM30[2]	-	**BOD Tank (Condensate Collection Tank)**	8,760 hr/yr	No. 6 or No. 7 Power Boiler, TRS Scrubber and the Condensate Stripper	PWR02, 03 CRECD07 CRE16	TRS, VOC
UPM31	-	**Turpentine System Venting**	-	-	-	-
Caustic Recovery Process Area						
CAU01[3]	CAUSV01	**No. 2 Lime Kiln (1957)**	7.3 tons CaO/hr	Variable throat venturi Scrubber	CAUCD01	PM/PM10
CAU02[3]	CAUSV02	**No. 3 Lime Kiln (1964)**	13.0 tons CaO/hr	Variable throat venturi Scrubber	CAUCD02	PM/PM10
CAU03[3]	CAUSV03	**No. 4 Lime Kiln (1977)**	15.0 tons CaO/hr	Variable throat venturi Scrubber	CAUCD03	PM/PM10
CAU04	CAUSV04	**No. 5 Slaker (1970)**	74.6 ADTP/hr	Fixed throat venturi Scrubber	CAUCD04	PM/PM10
CAU05	CAUSV05	**No. 6 Slaker (1970)**	74.6 ADTP/hr	Fixed throat venturi Scrubber	CAUCD05	PM/PM10
CAU06	CAUSV06	**Green Liquor Handling**	310,250 tons CaO/yr	-	-	-
	-	Green Liquor Surge Tank	-	-	-	-
	-	Green Liquor Spill Tank	-	-	-	-
	-	Green Liquor Clarifiers (3)	-	-	-	-
	-	No. 3 White Liquor Clarifier ** ** (used as "swing" clarifier. White or Green liquor)	-	-	-	-

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled
	-	Green Liquor Standpipe	-	-	-	-
	-	Green Liquor Day Tank	-	-	-	-
		Green Liquor Coolers (4)	-	-	-	-
	-	Dregs Filter Mix Tanks	-	-	-	-
	-	Dregs Filter Hoods	-	-	-	-
	-	Dregs Filter Vacuum Pumps	-	-	-	-
	-	Dregs Filter Dump Tank	-	-	-	-
	-	Reserve Tanks (6), one reserve tank for green liquor, one reserve tank for white or green liquor, and four reserve tanks for black or white liquor	-	-	-	-
CAU07	CAUSV07	**White Liquor Handling**	310,250 tons CaO/yr	-	-	-
	-	Grits Mix Tank	-	-	-	-
	-	Grits Washers (2)	-	-	-	-
	-	Grits Washwater Return Standpipe	-	-	-	-
	-	Causticizers (8)	-	-	-	-
	-	Causticizer Standpipe	-	-	-	-
	-	White Liquor Clarifiers (4)	-	-	-	-
	-	White Liquor Standpipes (2)	-	-	-	-
	-	White Liquor Day Tank	-	-	-	-
	-	Reserve Tanks (6), one reserve tank for green liquor, one reserve tank for white or green liquor, and four reserve tanks for black or white liquor	-	-	-	-
CAU08	CAUSV08	**Lime Mud Handling**	310,250 tons CaO/yr	-	-	-
	-	Unwashed Mud Mix Tank	-	-	-	-
	-	Lime Mud Pressure Filter Feed Tanks (2)	-	-	-	-
	-	Lime Mud Pressure Filters (2)	-	-	-	-
	-	Mud Washer	-	-	-	-
	-	Washed Mud Mix Tank	-	-	-	-
	-	Lime Mud Storage Tanks (4)	-	-	-	-
	-	Dewatering Aid Tank	-	-	-	-
	-	Precoat Filter Vacuum Pumps (3)	-	-	-	-
CAU09	N/A	**Lime Handling**	310,250 tons CaO/yr	-	-	-
	-	Lime Collection Conveyors (2)	-	-	-	-
	-	Lime Bucket Elevators (2)	-	-	-	-
	-	Hot Lime Storage Bins (2)	-	-	-	-
	-	Fresh Lime Storage Bin	-	-	-	-
	-	Purchased Lime Unloading Screw Conveyor	-	-	-	-
	-	Purchased Lime Transfer Conveyor	-	-	-	-
	-	Purchased Lime Bucket Elevator	-	-	-	-
CAU10	CAUSV10	**Fillback Storage**	310,250 tons CaO/yr	-	-	-

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled
	-	Fillback Tank	-	-	-	-
	-	Fillback Standpipe	-	-	-	-
CAU11	N/A	**No. 2 Lime Kiln Mud Precoat Filter**	7.3 tons CaO/hr	-	-	-
CAU12	N/A	**No. 3 Lime Kiln Mud Precoat Filter**	13.0 tons CaO/hr	-	-	-
CAU13	N/A	**No. 4 Lime Kiln Mud Precoat Filter**	15.0 tons CaO/hr	-	-	-
Chemical Recovery Process Area						
CRE01[3]	CRESV01A, CRESV01B	**No. 4 Recovery Furnace (1964)**	98,600 lb/hr BLS 430 MMBtu/hr #6 oil	No. 4 RF ESP	CRECD01	PM/PM10
	-	4 RF saltcake mix tank	-	No. 4 RF ESP	CRECD01-	PM/PM10
	-	4 RF saltcake collection tank	-	-	-	-
CRE02[3]	CRESV02A, CRESV02B	**No. 5 Recovery Furnace (1968)**	98,600 lb/hr BLS 430 MMBtu/hr #6 oil	No. 5 RF ESP	CRECD02	PM/PM10
	-	5 RF precipitator mix tank	-	No. 5 RFESP	CRECD02	PM/PM10
	-	5 RF saltcake mix tank	-	No. 5 RFESP	CRECD02	PM/PM10-
CRE03[3]	CRESV03A, CRESV03B	**No. 6 Recovery Furnace (1977)**	209,000 lb/hr BLS 950 MMBtu/hr #6 oil	No. 6 RF ESP	CRECD03	PM/PM10
	-	6 RF precipitator mix tank	-	No. 6 RF ESP	CRECD03	PM/PM10-
	-	6 RF saltcake mix tank	-	No. 6 SDT Scrubbers	CRECD06A, CRECD06B	PM10/TRS
CRE04[3]	CRESV04	**No. 4 Rec. Smelt Dissolving Tank (1964)**	98,600 lb/hr BLS	No. 4 SDT Scrubber	CRECD04	PM10/TRS
CRE05[3]	CRESV05	**No. 5 Rec. Smelt Dissolving Tank (1968)**	98,600 lb/hr BLS	No. 5 SDT Scrubber	CRECD05	PM10/TRS
CRE06[3]	CRESV06A, CRESV06B	**No. 6 Rec. Smelt Dissolving Tank (1977)**	209,000 lb/hr BLS	No. 6 SDT Scrubbers	CRECD06A, CRECD06B	PM10/TRS
CRE07[2]	PWRSV01, PWRSV02	**D Set Evaporators (1972)**	1,600 gpm WBL	No. 6 or No. 7 Power Boiler and TRS Scrubber	PWR02, 03 CRECD07	TRS, VOC HAPs SO_2
CRE08[2]	PWRSV01, PWRSV02	**E Set Evaporators (1974)**	1,600 gpm WBL	No. 6 or No. 7 Power Boiler and TRS Scrubber	PWR02, 03 CRECD07	TRS, VOC HAPs SO_2
CRE09[2]	PWRSV01, PWRSV02	**F Set Evaporators (1977)**	450gpm WBL 750gpm lBL	No. 6 or No. 7 Power Boiler and TRS Scrubber	PWR02, 03 CRECD07	TRS, VOC HAPs SO_2
CRE10[2]	PWRSV01, PWRSV02	**G Set Evaporators (1986)**	774,500 lb/hr evap	No. 6 or No. 7 Power Boiler and TRS Scrubber	PWR02, 03 CRECD07	TRS, VOC HAPs SO_2
CRE11	CRESV07	**Weak Black Liquor Storage**	8,760 hrs	-	-	-
	-	#1 Weak Black Liquor Tank	-	-	-	-
	-	#2 Dump tank	-	-	-	-
	-	#2 Weak black liquor tank	-	-	-	-

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled
	-	#3 Weak black liquor tank	-	-	-	-
	-	#1 Dump tank	-	-	-	-
CRE12	CRESV08	**Intermediate Liquor Storage**	8,760 hrs	-	-	-
	-	BLOX foam tank	-	-	-	-
	-	#1 Reserve tank	-	-	-	-
	-	#5 Reserve tank	-	-	-	-
	-	#4 Reserve tank	-	-	-	-
	-	#3 Heavy Black liquor tank	-	-	-	-
CRE13	CRESV09	**Heavy Black Liquor Storage**	8,760 hrs	-	-	-
	-	64% black liquor tank	-	-	-	-
CRE15	PWRSV01, PWRSV02	**Pulping Process Condensate Collection Tank/Stripper Feed Tank**	8,760 hrs	No. 6 or No. 7 Power Boiler	PWR02, 03	TRS, VOC
CRE16(2)	PWRSV01, PWRSV02	**Condensate Stripper System**	1,140 gpm	No. 6 or No. 7 Power Boiler	PWR02, 03	TRS, VOC
CRE17(2)	BLPSV12	**BLOX System Tanks (4)**	8,760 hrs	RTO	BLP12	HAPs TRS, VOC
CRE18(2)	PWRSV01, PWRSV02	**LVHC Collection System Drains**	-	No. 6 or No. 7 Power Boiler and Condensate Stripper	PWR02, 03 CRE16	TRS, VOC HAPs
CRE19(2)	PWRSV01, PWRSV02	**Stripper Off Gas System Drains**	-	No. 6 or No. 7 Power Boiler and Condensate Stripper	PWR02, 03 CRE16	TRS, VOC HAPs
CRE-20	-	**Evaporators Venting**	-	-	-	-
CRE21	-	**BLOX HVLC Gas Collection System Venting**	-	-	-	-
CRE22(2)	PWRSV01, PWRSV02	**BLOX HVLC Collection System - Condensate Tank**		No. 6 or No. 7 Power Boiler and Condensate Stripper	PWR02, 03 CRE16	TRS, VOC HAPs
CRE23	-	**Pulping Process Condensate Collection Tank/Stripper Feed Tank Venting**	-	-	-	-
Bleach Plant Process Area						
BLP01(2)	BLPSV01	**D Bleach Line**	37.9 ODTP/hr	Turbotak Scrubber	BLPCD01	Cl_2, HCl
		Washer Hoods	-	Scrubber	BLPCD01	Cl_2, HCl
		D1 Tower	-	Scrubber	BLPCD01	Cl_2, HCl
		D2 Tower	-	Scrubber	BLPCD01	Cl_2, HCl
		DO Tower				Cl_2, HCl
		DD1 Seal Tank	-	Scrubber	BLPCD01	Cl_2, HCl
		DD2 Seal Tank	-	Scrubber	BLPCD01	Cl_2, HCl
		E1 & E2 Seal Tanks	-	Scrubber	BLPCD01	Cl_2, HCl
		DO Seal Box	-	Scrubber	BLPCD01	Cl_2, HCl

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled
BLP02[2]	BLPSV02	**E Bleach Line**	41.3 ODTP/hr	Caldwell-McKay Scrubber	BLPCD02	Cl_2, HCl
		Washer Hoods	-	Scrubber	BLPCD02	Cl_2, HCl
		D Tower	-	Scrubber	BLPCD02	Cl_2, HCl
		D Seal Tank	-	Scrubber	BLPCD02	Cl_2, HCl
		DO Seal Tank	-	Scrubber	BLPCD02	Cl_2, HCl
		E Seal Tank		Scrubber	BLPCD02	Cl_2, HCl
		E Tower	-	Scrubber	BLPCD02	Cl_2, HCl
		DO Tower	-	Scrubber	BLPCD02	Cl_2, HCl
		DO Blend Chest	-	Scrubber	BLPCD02	Cl_2, HCl
BLP03[2]	BLPSV03	**F Bleach Line**	37.5 ODTP/hr	Scrubber	BLPCD03	Cl_2, HCl
		Washer Hoods	-	Scrubber	BLPCD03	Cl_2, HCl
		Post O_2 Surge Tank	-	Scrubber	BLPCD03	Cl_2, HCl
		D Tower	-	Scrubber	BLPCD03	Cl_2, HCl
		D Seal Tank	-	Scrubber	BLPCD03	Cl_2, HCl
		DO Tower	-	Scrubber	BLPCD03	Cl_2, HCl
BLP04[2]		**E Bleach O_2 Delignification**	41.3 ODTP/hr	-	-	-
	BLPSV012	O_2 Blend Chest	-	RTO	BLP12	VOC, HAPs
	BLPSV012	O_2-1 Washer and Filtrate Tank	-	RTO	BLP12	VOC, HAPs
	BLPSV012	O_2-2 Washer and Filtrate Tank	-	RTO	BLP12	VOC, HAPs
	BLPSV012	O_2 Pressate Level Tank	-	RTO	BLP12	VOC, HAPs
	BLPSV012	O_2 System Blow Tank	-	RTO	BLP12	VOC, HAPs
	BLPSV012	East and West Twin Roll Press	-	RTO	BLP12	VOC, HAPs
	BLPSV04	Hold Tank	-	-	-	-
	BLPSV04	O_2 Reactor	-	-	-	-
BLP05	BLPSV05	**F Bleach O_2 Delignification**	37.5 ODTP/hr	-	-	-
		Pre-O_2 Blend Chest	-	-	-	-
		O_2 Reactor	-	-	-	-
		Pre-O_2 Pressate Tank	-	-	-	-
		O_2-1 Pressate Tank	-	-	-	-
		O_2-2 Pressate Tank	-	-	-	-
		O_2 Blow Tank	-	-	-	-
		Pre O_2 O_2-1 and O_2-2 Presses	-	-	-	-
		O_2 Interstage Chest	-	-	-	-
BLP06		**High Density Storage Tanks**	8,760 hr/yr	-	-	-
	BLPSV012	#1 Hi density chest (Unbleached)	-	RTO	BLP12	VOC, HAPs
	BLPSV06	#2 Hi density chest (Bleached)	-	-	-	-
	BLPSV06	#3 Hi density chest (Bleached)	-	-	-	-
	BLPSV06	#4 Hi density chest (Bleached)	-	-	-	-
	BLPSV06	#41 Hi density chest (Unbleached)	-	-	-	-

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled
BLP07	BLPSV07	**High Density Chests**	8,760 hr/yr	-	-	-
		#38 Hi density chest (Bleached)	-	-	-	-
		#39 Hi density chest (Bleached)	-	-	-	-
		#40 Hi density chest (Unbleached)	-	-	-	-
		#41 Hi density chest (Unbleached)	-	-	-	-
		#43 Hi density chest (Bleached)	-	-	-	-
		#44 Hi density chest (Bleached)	-	-	-	-
BLP08	BLPSV08	**SVP Plant**	1.5 tons/hr	-	-	-
	-	Scrubber Vent Pipe	-	-	-	-
	-	ClO_2 Generator Explosion Hatch Vent Pipe	-	-	-	-
BLP09	BLPSV09	**R3 Plant**	1.67 tons/hr	-	-	-
	-	Scrubber Vent Pipe	-	-	-	-
	-	ClO_2 Generator Explosion Hatch Vent Pipe	-	-	-	-
	-	3 Chlorine Dioxide Storage Tanks	-	-	-	-
BLP11	-	**E Oxygen Delignification HVLC Gas System Venting**	-	-	-	-
BLP12[2]	BLPSV012	**Regenerative Thermal Oxidizer (2007)**	3.9 MMBtu/hr			VOC
BLP13	-	**HVLC Gas Collection System Venting at RTO**	-	-	-	-
BLP14[2]	PWRSV01, 02	**Bleach Plant HVLC Condensate Collection System Tanks**		No. 6 or No. 7 Power Boiler and Condensate Stripper	PWR02, 03 CRE16	Methanol, VOC and HAPs
		E-Line / D-Wash Condensate Tank				
		RTO Combined Condensate Tank				
BLP015	-	Methanol (MeOH) Tank	19,000 gallons	-	-	-
Paper Machine Process Area						
PRM01	PRMSV01	**No. 1 Paper Machine**	49.3 tons/hr	-	-	-
	-	Secondary Screen Feed Tank (2)	-	-	-	-
	-	Vents (3)	-	-	-	-
	-	Ceiling Vents (9)	-	-	-	-
	-	Air Knife Coater Vent	-	-	-	-
	-	Coater Section Hoods (4)	-	-	-	-
PRM03	PRMSV03	**No. 3 Paper Machine**	28.6 tons/hr	-	-	-
	-	No. 3 PM Vacuum Pump Exhaust	-	-	-	-
PRM04	PRMSV04	**No. 4 Paper Machine**	40.0 tons/hr	-	-	-
	-	Fourdrinier vents (2)	-	-	-	-
PRM05	PRMSV05	**No. 5 Paper Machine**	27.0 tons/hr	-	-	-
PRM06	PRMSV06	**No. 6 Paper Machine**	45.8 tons/hr	-	-	-
	-	No. 6 PM Vacuum Pump Exhaust (2)	-	-	-	-
PRM07	PRMSV07	**FRP Chest**	8,760 hr/yr	-	-	-
PRM09	PRMSV09	No. 1 Wet End Starch silo (1991)	43,000 lb/hr	Bin Vent Fabric filter	PRMCD01	PM/PM10

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled
PRM10	PRMSV10	No. 2 Wet End Starch silo (1991)	43,000 lb/hr	Bin Vent Fabric filter	PRMCD02	PM/PM10
PRM11	PRMSV11	**Bleached Stock LD Storage**	8,760 hr/yr	-	-	-
PRM13	PRMSV12	**No. 1 Dry End Starch Silo (1970)**	43,000 lb/hr	Bin Vent Fabric Filter	PRMCD03	PM/PM10
PRM14	PRMSV13	**No. 2 Dry End Starch Silo (1970)**	43,000 lb/hr	Bin Vent Fabric Filter	PRMCD04	PM/PM10
PRM15	PRMSV14	**No. 3 Dry End Starch Silo (1970)**	43,000 lb/hr	Bin Vent Fabric Filter	PRMCD05	PM/PM10
Power House Process Area						
PWR01	PWRSV01 North stack	**No. 5 Power Boiler (1949)**	193 MMBTU/hr Coal, and Oil	Mech. Dust Collector (cyclone), ESP	PWRCD06/03	PM10
PWR02	PWRSV01 North Stack	**No. 6 Power Boiler (1958)**	496 MMBTU/h Coal/Wood 448 - coal 350 - wood	Cyclone, ESP, Overfire Air System	PWRCD07/01/09	PM10
PWR03	PWRSV02 South Stack	**No. 7 Power Boiler (1969)**	543 MMBTU/hr Coal/Wood 477 - coal 466 - oil 300 - wood	Cyclone, ESP	PWRCD08/02	PM10
PWR05	PWRSV03	**No. 9 Power Boiler with duct burner (1997)**	893 MMBTU/hr	Oxidation Catalyst/SCR	PWRCD04/05	CO, VOC/ NO_x
PWR10	-	**Oil Storage Tank**	900,000 gallons	-	-	-
PWR12	-	**LVHC System Venting at Nos. 6 & 7 Power Boilers**	-	-	-	-
Wastewater Treatment System						
WWT01	WWTSV01	**Primary Clarification/Sludge Handling**	93 million gal/day	-	-	-
WWT02	-	**Aerated Stabilization Basin**	93 million gal/day	-	-	-
WWT03	-	**C Pond**	11 billion gallons (total volume)	-	-	-
Miscellaneous Process Area						
MIS01	-	**Paved Roads**	-	-	-	-
MIS02	-	**Unpaved roads**	-	-	-	-
MIS03	-	**Refrigeration systems**	-	-	-	-
MIS04	MISSV01	**Waste Paper Baler**	3.3 tons/hr	cyclone	MISCD04	PM, PM10
MIS09	-	**Multiple No. 2 Fuel Oil Combustion Emission Units**	various	-	-	-
MIS10	-	**Miscellaneous Liquid Storage Tank**	900,000 gallon	-	-	-

(1) The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.
(2) Units are subject to the MACT Subpart S - 40 CFR Part 63, Subpart S
(3) Units are subject to the MACT Subpart MM - 40 CFR Part 63, Subpart MM

III. Definitions

"ADTP" means Air Dried Tons of Pulp.

"ADTFP" means Air Dried Tons of Finished Paper.

"ADTUBP" means Air Dried Tons of Unbleached Pulp.

"AP-42" means the Compilation of Air Pollutant Emission Factors for Stationary Point and Area Sources.

"BACT" means Best Available Control Technology as defined in 9 VAC 5-50-250.

"Base Case" means the HVLC requirements of 40 CFR Subpart S as written.

"BHA" means Blow Heat Accumulators.

"BLOX" means Black Liquor Oxidation Tanks.

"BLS" means Black Liquor Solids.

"BOD" means Biological Oxygen Demand.

"CAM" means Compliance Assurance Monitoring per 40 CFR Part 64.

"CaO" means quick lime.

"CEMS" means Continuous Emission Monitoring System.

"CFR" means Code of Federal Regulations.

"CH4" means Methane.

"CMS" means Continuous Monitoring System.

"CO" means Carbon Monoxide.

"CPMS" means Continuous Parameter Monitoring System.

"DCE" means Direct Contact Evaporator.

"Department" means the Department of Environmental Quality, an agency of the Commonwealth described in § 10.1-1183 of the Code of Virginia.

"Emission caps" means the site-wide limitations on the rate of emissions of an air pollutant established and identified as emission caps in 9 VAC 5-230-40 A. This limitation on the annual emissions of a pollutant, expressed in tons per year, is derived from emissions factors and site-specific quantification methods believed to be accurate at the time of original establishment of the caps. Emissions attributed to the emission caps shall include fugitive emissions to the extent quantifiable, and emissions resulting from startup, shutdown and malfunction conditions.

"EPA" means the United States Environmental Protection Agency.

"Facility" means the Kraft Paper Mill located on the contiguous property at 34040 Union Camp Drive, Franklin, Virginia, under common control by International Paper Company, and its successors in ownership.

"FESOP" means Federally Enforceable State Operating Permit.

"Force Majeure" is defined as an event that cannot be reasonably anticipated or controlled, such as a natural disaster, hurricane, earthquake, flood, war or other such occurrences. Circumstances must be abnormal and unforeseeable, so that the consequences could not have been avoided through the exercise of all due diligence.

"HAP" means Hazardous Air Pollutant.

"H_2SO_4" means Sulfuric Acid Mist.

"HVLC" means High Volume Low Concentration.

"International Paper'' refers to International Paper Company, a New York corporation authorized to conduct business in Virginia and the owner/operator of a Kraft Paper Mill located at 34040 Union Camp Drive, in Franklin, Virginia.

"LAER" means Lowest Achievable Emission Rate as defined in 9 VAC 5-50-250.

"LD" means Low Density.

"LVHC" means Low Volume High Concentration. The points of collection are listed in Appendix A.

"MACT" means Maximum Achievable Control Technology – all MACTS are in 40 CFR Part 63.

"Major new source review (major NSR) program" means a program for the preconstruction review and permitting of new major stationary sources or major modifications (physical changes or changes in the method of operation) which are subject to review in accordance with Article 8 (9 VAC 5-80-1605 et seq.) or Article 9 (9 VAC 5-80-2000 et seq.) of Part II of 9 VAC 5 Chapter 80.

"MDTFP" means Machine Dried Tons of Finished Paper.

"MeOH" means Methanol.

"Minor new source review (minor NSR) program" means a program for the preconstruction review and permitting of new stationary sources or modifications (physical changes or changes in the method of operation) which are subject to review in accordance with Article 6 (9 VAC 5-80-1100 et seq.) of Part II of 9 VAC 5 Chapter 80 and which do not qualify as new major stationary sources or major modifications under the major NSR program.

"Modification" means the definition of modification in the applicable new source review program, provided the emissions unit or process is not subject to a NESHAP.

"NCASI" means National Council of the Paper Industry for Air and Stream Improvement, Inc.

"NCG" means Non Condensible Gas.

"NDCE" means Non Direct Contact Evaporator.

"New source review (NSR) program" means a program for the preconstruction review and permitting of new stationary sources or modifications (physical changes or changes in the method of operation) which are subject to review in accordance with Article 6 (9 VAC 5-80-1100 et seq.), Article 8 (9 VAC 5-80-1605 et seq.) or Article 9 (9 VAC 5-80-2000 et seq.) of Part II of 9 VAC 5 Chapter 80.

"NESHAP" means a reference to the National Emission Standards for Hazardous Air Pollutants as codified in 40 CFR Part 61 or Part 63.

"NO_x" means Nitrogen Oxide compounds.

"NSPS" means New Source Performance Standards – 40 CFR Part 60.

"ODTP" means Oven Dried Tons of Pulp.

"Parity Project" means the HVLC sources of emissions that IP will collect using the Equivalency-By-Permit regulation as defined in Appendix A.

"Physical or operational change" means any physical or operational change at the affected facility that involves the addition of a new emissions unit.

"PM" means Particulate Matter.

"PM_{10}" means Particulate Matter less than 10 microns.

"ppmv" means parts per million by volume.

"Project" means any physical change or change in the method of operation of a process or emissions unit (not including an increase in throughput), including replacement thereof, which would require a change to the emission quantification methodologies described in Sections XIV, XV, or XVI of the FESOP permit.

"PSD" means Prevention of Significant Deterioration.

"RTO" means Regenerative Thermal Oxider.

"SAPCB" means State Air Pollution Control Board.

"SAPCB Regulations" means 9 VAC 5 Chapters 10 through 80.

"SARA" means Superfund Amendments and Reauthorization Act.

"SO_2" means Sulfur Dioxide.

"SSM" means Startup, Shutdown, Malfunction.

"The Board" refers to the SAPCB.

"Title V permit program" means the operating permit system established pursuant to Title V of the federal Clean Air Act and regulations and codified in Article 1 (9 VAC 5-80-50 et seq.), Article 2 (9 VAC 5-80-310 et seq.), Article 3 (9 VAC 5-80-360 et seq.), and Article 4 (9 VAC 5-80-710 et seq.) of Part II of 9 VAC 5 Chapter 80.

"TRI" means Toxic Release Inventory.

"TRO" means the Tidewater Regional Office of the Department of Environmental Quality.

"TRS" means Total Reduced Sulfur.

"VOC" means Volatile Organic Compounds as defined in 9 VAC 5-10-20 of Virginia SAPCB regulations.

"Variance" means the 9 VAC 5 Chapter 230 of Virginia SAPCB regulations.

"Wood" means cellulosic material used as raw material for the pulping process or as fuel, including sawdust, bark, shredded or chipped tree trunks or branches, shredded or chipped untreated general wood waste, and shredded or chipped creosote-treated wood waste.

IV. Facility-Wide Requirements

A. Site-Wide Emission Caps

Pollutant	PM	PM_{10}	SO_2	NO_x	CO	VOC	TRS	Lead	H_2SO_4	Fluorides
tons/yr	1166	804	7980	3000	2568	694	223	0.135	100	20.4

(9 VAC 5-230-40 C and Condition III.A of the 8/12/09 FESOP)

B. Future Adjustments to the Emission Caps

Future Regulations – If International Paper becomes subject to future regulations, International Paper may not use the emissions credits obtained from the associated emissions reductions to comply with the emission caps. The emission caps will be adjusted to account for any such applicable requirements to which International Paper has become subject. In the interim, International Paper shall submit to the Department a description of how it plans to comply with such new regulation(s) and what the associated emission change(s) will be for the pollutants specified in Paragraph A. The information submitted shall specify the emission units affected and any changes in emissions that will result from complying with the regulation(s).
(9 VAC 5-230-40D and Condition III.B of the 8/12/09 FESOP)

C. Operating under the Emission Caps

1. Operation of control devices
   International Paper shall continue to operate the emission control equipment listed in this permit, as amended from time to time, in accordance with the SAPCB and federal regulations. The equipment shall be operated in accordance with good air pollution control practices at all times. Nothing in the permit shall act to deprive International Paper of any defenses it may have in an enforcement action or to require compliance with emission standards when not otherwise required (such as during periods of startup, shutdown and malfunction).
   (9 VAC 5-230-70 and Condition III.C.1 of the 8/12/09 FESOP)

2. Prohibition on emissions trading
   International Paper may not engage in any emissions trading beyond that allowed under a program approved by the SAPCB. No emissions credits obtained from emissions reductions external to the affected facility may be used to comply with the emission caps.
   (9 VAC 5-230-60B and Condition III.C.2 of the 8/12/09 FESOP)

D. Compliance with State and Federal Regulations and Air Permits

The FESOP permit allows International Paper to construct new emission units or modify existing emission units at the Franklin Mill site. Any construction, reconstruction or modification activities shall be deemed to satisfy all requirements of the major and minor new source review program for the pollutants specified in Section IV.A. provided that no exceedances of any emission caps occur. Exceedance of any emission cap may subject International Paper to permitting requirements, enforcement and/or permit revocation.
(9 VAC 5-230-50B and Condition IV of the 8/12/09 FESOP)

1. **Major NSR Permitting and Registration**

Compliance with the FESOP permit shall be deemed to satisfy all requirements of the major new source review program for the pollutants listed in Condition A of this section.

a. For any physical or operational change (as defined in Section III) that would otherwise be subject to the major NSR program, International Paper shall submit a control technology application to and shall obtain approval thereof from the Department that the control technology to be installed meets the applicable requirements of Article 4 (9 VAC 5-50-240 et seq.) of Part II of 9 VAC 5 Chapter 50. International Paper shall install emission controls that are consistent with the approval. International Paper may begin and complete actual construction of the physical or operational change prior to receiving approval from the Department if each of the following conditions is met:

i International Paper has submitted an approvable control technology application for the physical or operational change with a notice of intent to begin actual construction of the physical or operational change.

ii International Paper has submitted a certification that it:

(a) Freely assumes all financial and other risks associated with beginning actual construction of the physical or operational change prior to receiving the control technology approval, and;

(b) Acknowledges that the Department, in evaluating the application, may not consider any consequences to the applicant of beginning actual construction prior to receiving the control technology approval.

iii The Department has not, within 30 days of receipt of the application, issued a written notice to International Paper, based on concerns about air quality impacts or emissions control technology, requiring the termination of construction as soon as practicable but no later than five business days after receipt of the notice.

iv International Paper constructs the physical or operational change as described in the control technology application.

v International Paper does not commence operation of the physical or operational change until the control technology approval has been granted.

b. If the Department has not, within 60 days of receipt of the control technology application submitted in accordance with paragraph a of this section, issued a written notice to International Paper either approving or objecting to the construction of the physical or operational change, the control technology application may be deemed granted.

(9 VAC 5-230-50D and Condition IV.A of the 8/12/09 FESOP)

2. **Minor NSR permitting**

a. Compliance with this permit shall be deemed to satisfy all requirements of minor NSR program for all pollutants listed in Condition A of this section.

b. Except for pollutants specified in Condition A of this section, compliance with this permit does not relieve IP from obligations to comply with requirements addressing emissions of hazardous air pollutants under Articles 4 (9 VAC 5-60-200 et seq.) and 5 (9 VAC 5-60-300 et seq.) of 9 VAC 5 Chapter 60.

(9 VAC 5-230-50C and Condition IV.B of the 8/12/09 FESOP)

3. **Other Regulations Encompassed**

a. New Source Performance Standards (NSPS) for Stationary Sources: International Paper is subject to various NSPS regulations and shall comply with all the requirements of each NSPS regulation. If International Paper becomes subject to a regulation listed in 40 CFR Part 60, after the effective date of the permit, the facility shall comply with all requirements under that regulation.
(9 VAC 5-230-60A and Condition IV.C.1 of the 8/12/09 FESOP)

b. National Emission Standards for Hazardous Air Pollutants: International Paper is subject to various NESHAP regulations and shall comply with all the requirements of each NESHAP except as listed below. If International Paper becomes subject to a regulation listed in 40 CFR Part 61 or Part 63, after the effective date of the permit, the facility shall comply with all requirements under that regulation.

c. International Paper has elected to demonstrate compliance with the requirements of the HVLC portion of 40 CFR Part 63, Subpart S by using 40 CFR 63.94. International Paper shall comply with the Equivalency-By-Permit conditions for the HVLC portion of Subpart S that have been approved by EPA and the Department. This facility shall comply with 40 CFR 63.443(a)(1) by controlling the HAP emissions from the following equipment systems:

i Each LVHC system

ii Each knotter or screen system with total HAP mass emission rates greater than or equal to the rates specified in 40 CFR 63.443(a)(1)(ii)(A) or (a)(1)(ii)(B) or the combined rate specified in 40 CFR 63.443(a)(1)(ii)(C)

iii D-Wash Line Washer and Accepts Tank

iv B-Decker and Filtrate Tank

v No. 1 High Density Storage Tank

vi Nos. 1-4 BLOX Tank Vents

vii E-Bleach Line O_2–1 Washers and Filtrate Tank

viii E-Bleach Line O_2–2 Washers and Filtrate Tank

ix E-Bleach Line East and West Twin Roll Press

x E-Bleach Line O_2 System Blow Tank, Blend Chest, and Pressate Level Tank

Note:

(a) Emissions from the mill's knotter and screen systems are not required to be collected and controlled. These systems have been found to have HAP concentrations below the thresholds specified in 40 CFR 63.443(a)(1)(ii).

(b) Emissions from the E-decker are not required to be controlled since the HAP (as MeOH) content of the shower water used on this system was found to be less than the threshold specified in 40 CFR 63.443(a)(1)(iv)(B).

(c) Emissions from the following systems (as defined in Appendix A) are not required to be collected and controlled under International Paper's alternative 40 CFR 63.443 compliance approach:

(i) A & B Washer systems

(ii) C Washer system

(iii) D-Wash Line seal tank

(iv) Vertical Foam Tank

(v) Knotters and Screens

(vi) E-Bleach Line oxygen delignification system O_2 reactor purge vent and pressate hold tank

(vii) F-Bleach Line Oxygen Delignification System

(9 VAC 5-230-60A and Condition IV.C.3 of the 8/12/09 FESOP)

d. International Paper shall remain in compliance with all other SAPCB Regulations. Compliance with the FESOP shall constitute compliance with Article 4 of 9 VAC 5 Chapter 50 and Article 6, Article 8 and Article 9 of 9 VAC 5 Chapter 80.
(9 VAC 5-230-50B, 9 VAC 5-230-60A and Condition IV.C.4 of the 8/12/09 FESOP)

e. Compliance with the terms and conditions of this permit shall not relieve International Paper of its obligation to comply with applicable local, State or Federal laws and regulations not addressed in this section.
(9 VAC 5-230-60A and Condition IV.C.5 of the 8/12/09 FESOP)

E. Federally Enforceable State Operating Permit

1. Periodic Review and Amendment of the FESOP

The FESOP may be periodically reviewed and amended as specified in this section.

a. This FESOP may be reviewed and amended as outlined in 9 VAC 5-230-80 or 9 VAC 5-230-120.

b. The Department reserves the right to amend the permit as appropriate to assure compliance with any of the applicable requirements.

c. In accordance with 9 VAC 5-230-80, the following amendments to the FESOP permit may be accomplished using an administrative amendment:

i Revisions to the FESOP to incorporate descriptions or other information relative to physical or operational changes (as defined in Section III) that have occurred at the Facility following adoption of the variance.

ii Revisions to emissions quantification methods described in Sections IX, X or XI of the FESOP used to demonstrate compliance with the emission caps per Condition F.1

(9 VAC 5-230-80 and Condition V of the 8/12/09 FESOP)

2. Termination of the FESOP Permit

The FESOP permit may be revoked or terminated as provided below upon written notice for any of the following reasons:

a. If the EPA or the Department determines that continuation of the permit presents an imminent and substantial endangerment to the public health or welfare, or the environment.

b. If the permit causes emissions from this facility which result in violations of, or interferes with the attainment and maintenance of, any ambient air quality standard.

c. If International Paper knowingly makes material misstatements, including, but not limited to, falsifying emissions data.

d. If International Paper neglects or refuses to comply with:

i Any condition of this permit; or

ii Any applicable requirements.

e. For any other reasons not specified here for which the Department has statutory authority to terminate the permit.

(9 VAC 5-230-110 and Condition VI of the 8/12/09 FESOP)

F. Compliance Determination

International Paper shall demonstrate compliance with the emission caps as follows:

1. Compliance shall be demonstrated on a rolling 12-month basis for each pollutant. Actual emissions for each calendar month shall be calculated by the last working day of the month following the close of the month. A 12-month total shall be calculated each month for each pollutant by adding the total emissions for the most recent month to the totals for the preceding 11 months.
2. Actual emissions from existing processes (those whose emissions were included in determining the emission caps) shall be determined using the methodology used in establishing the emission caps except where the Department has approved alternative emissions quantification methods.
3. Actual emissions from any physical or operational changes (those not in existence on the effective date of the variance) shall be calculated using methodology approved by the Department.
4. Due to an inconsistency between the MACT Phase 2 downtime allowance of 4% for the RTO (BLP12) and the way the emission caps were derived, when quantifying the VOC and TRS emissions for cap compliance purposes, emissions from the HVLC collection system vents can be excluded from the total emissions if the venting time is less than the 4% of the system operating time.

(9 VAC 5-230-80 and Condition IV.D of the 8/12/09 FESOP)

G. Monitoring

1. Fuel Certifications - International Paper shall obtain a certification from the fuel supplier with each shipment of coal or oil. Each fuel supplier certification shall include the following as appropriate for the fuel type:
   a. The name of the fuel supplier;
   b. The date on which the oil or coal was shipped;
   c. The volume of oil or weight of coal delivered in the shipment;
   d. A statement that the oil complies with the American Society for Testing and Materials specifications for the type of oil being delivered;
   e. The sulfur content of the oil or coal;
   f. Documentation of sampling of the oil indicating the location of the residual oil when the sample was drawn;
   g. The method used to determine the sulfur content of the residual oil or coal; and,
   h. The ash content of the coal.
2. Site-Wide Monitoring - International Paper shall monitor throughputs, hours of operation, fuel sulfur and ash contents, venting minutes and other parameters as necessary to determine actual emissions to demonstrate compliance with the emission caps. Monitoring to show compliance with the emission caps in this permit or other SAPCB regulations shall be carried out as specified in the applicable regulations, the FESOP permit, in this permit, or as agreed to by the Department.
3. CEMS/COMS Quality Control Program - A CEMS/COMS quality control program, which includes a written Quality Assurance/Quality Control (QA/QC) Plan, and which meets the requirements of 40 CFR 60.13 and Part 60 Appendices B and F shall be implemented for all continuous emissions and opacity monitoring systems unless otherwise specified in the QA/QC Plan. Relative Accuracy Test Audits (RATAs) and Cylinder

Gas Audits (CGAs) shall be carried out in conformance with the appropriate schedules as defined by the QA/QC Plan. The facility shall obtain approval of the QA/QC Plan from the Department.

4. Calculating Emissions - Actual emissions of cap pollutants from the facility shall be calculated as described in Condition F of this section. Records shall be kept for five years and shall be available for inspection.

5. Air Pollution Control Equipment - Each air pollution control device shall be equipped with some means of continuously monitoring the device to determine that it is operating in an efficient manner. Monitoring shall be carried out as specified in the applicable regulations, the FESOP permit, this permit or as agreed to by the Department.

H. Maintenance/Operating Procedures

The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment, monitoring devices, and process equipment which affect such emissions:

1. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
2. Maintain an inventory of spare parts.
3. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
4. Train operators in the proper operation of all such equipment prior to such operation and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to Department personnel upon request.
(9 VAC 5-80-110 and Condition VII.G.1 of the 8/12/09 FESOP)

I. Testing

1. Performance Testing - Future performance testing shall be conducted in a manner consistent with acceptable Department procedures and methods. The details of the tests and reports are to be arranged in advance with the Department. International Paper shall submit to the Department an approvable test protocol at least 30 days prior to testing. A copy of the test results shall be submitted to the Department within 60 days after test completion and shall conform to a format acceptable to the Department.
2. Testing/Monitoring Ports - The permitted facility shall be constructed so as to allow for emissions testing and monitoring upon reasonable notice at any time, using appropriate methods. This includes constructing the facility such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and providing stack or duct that is free from cyclonic flow. Test ports shall be provided when requested at the appropriate locations.
3. Testing - The Department reserves the right to require site-specific testing at any time to verify compliance with information submitted by International Paper.
4. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.
(9 VAC 5-80-490E and Condition VII.G.2 of the 8/12/09 FESOP)

J. Notifications

1. Force Majeure events shall not cause termination of the FESOP permit providing that International Paper complies with the following notification requirements:
2. Within four calendar days after it becomes aware of an event which International Paper believes constitutes a force majeure International Paper shall notify the Department in writing of the anticipated consequences of such event with respect to the terms and conditions of this permit and the anticipated time and methods to resolve such consequences.
3. Within 10 calendar days of becoming aware of any exceedance of any emission cap International Paper shall notify the Department in writing of the exceedance.
(9 VAC 5-80-490E and Condition VII.G.3 of the 8/12/09 FESOP)

K. Recordkeeping

The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this and the FESOP permit. The content and format of such records shall be arranged with the Department. These records shall include, but are not limited to:

1. International Paper shall keep records of fuel shipment dates, fuel delivery amounts, fuel and process throughputs, fuel sulfur and coal ash contents, emissions and other parameters as necessary to determine actual emissions to demonstrate compliance with the emission caps. Records shall be kept for five years and shall be available for inspection.
2. International Paper shall keep CMS records for No. 2, No. 3 and No. 4 Lime kilns (TRS and O2), the No. 4, No. 5 and No. 6 Recovery Furnaces (opacity, TRS and O2), the No. 5, No. 6 and No. 7 Power Boilers (opacity, NO_x, SO_2 and CO), and the No. 9 power boiler (opacity, NO_x and CO). (This does not include one minute data.)
3. International Paper shall keep records of:
    a. Initial and continuous compliance testing.
    b. CMS data, calibrations and calibration checks, percent operating time, and excess emissions.
    c. Results of all stack tests, visible emission evaluations and performance evaluations.
    d. Scheduled and unscheduled maintenance and operator training of air pollution control equipment, monitoring devices, and process equipment which affect emissions.
4. Records shall be available for inspection and shall be kept for five years.
(9 VAC 5-80-490E and Condition VII.G.4 of the 8/12/09 FESOP)

L. Reporting

1. Semi-Annual and Quarterly Reports - Excess Emissions and CMS Performance Reports for MACT Requirements - The permittee shall submit reports to the Department, within 30 days after the end of each semi-annual or quarterly period. Each semi-annual or quarterly report shall include the following:
    a. The date and time identifying each period during which the CMS was inoperative except for zero (low-level) and high-level checks;
    b. The date and time identifying each period during which the CMS was out of control, as defined in 40 CFR 63.8(c)(7) of 40 CFR Part 63, Subpart A;
    c. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions and parameter monitoring exceedances, as defined in 40 CFR Part 63, Subpart S, that occurs during startups, shutdowns, and malfunctions of the affected source;

d. The specific identification (i.e., the date and time of commencement and completion) of each time period of excess emissions and parameter monitoring exceedances, as defined in the relevant standards, that occurs during periods other than startups, shut-downs, and malfunctions of the affected source;

e. The nature and cause of any malfunction (if known);

f. The corrective action taken or preventive measures adopted;

g. The nature of the repairs or adjustments to the CMS that was inoperative or out of control;

h. The total process operating time during the reporting period.

i. One copy of the semi-annual or quarterly report shall be submitted to the U.S. Environmental Protection Agency at the address below:

Associate Director
Office of Air Enforcement (3AP10)
U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

2. Reports for CMS - Lime kilns, Recovery Boilers and No. 9 Power Boiler - The permittee shall furnish written reports to the Department of excess emissions on a quarterly basis, postmarked no later than the 30th day following the end of the calendar quarter. These reports shall address TRS emissions from the No. 2, No. 3, and No. 4 Lime Kilns, and the No. 4, No. 5, and No. 6 Recovery Boilers, opacity from the No. 4, No. 5, No. 6 Recovery Boilers and the No. 9 Power Boiler, and NO_x and CO emissions from the No. 9 Power Boiler. The reports shall include, but are not limited to the following information:

a. The magnitude of excess emissions, any conversion factors used in the calculation of excess emissions, and the date and time of commencement and completion of each period of excess emissions;

b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the process, the nature and cause of the malfunction (if known), the corrective action taken or preventative measures adopted;

c. The date and time identifying each period during which the continuous monitoring systems were inoperative except for zero and span checks and the nature of the system repairs or adjustments;

d. When no excess emissions have occurred or the CMS have not been inoperative, repaired or adjusted, such information shall be stated in that report;

e. The number of valid hours for each TRS/oxygen, opacity, NO_x, and/or CO CEMS during the quarter, and;

f. The number of operating hours for each monitored process or unit during the quarter.

3. Monitor Downtime Reports for the No. 5, No. 6 and No. 7 Power boilers - The permittee shall furnish written reports to the Department of monitor downtime on an quarterly basis, postmarked no later than the 30th day following the end of the calendar quarter. These reports shall include but are not limited to the following information:

a. The date and time identifying each period during which each CMS was inoperative except for zero and span checks, and the nature of the system repairs or adjustments;

b. The number of valid hours for each SO_2, NO_x, and CO CMS during the quarter; and

c. The number of operating hours for each boiler during the quarter.

4. Annual Reports - International Paper shall include the following with the Title V annual emissions statement:

   a. For projects (as defined in Section III) completed at the mill during the reporting period:

      i A brief description of each project explaining what changes were made and any impacts the change may have on air pollution emissions, and

      ii If a change in an emission factor is being submitted with the emissions statement, justification shall be submitted with the statement. This justification may include emission testing from before and after the project completion to prove change the in emission factor.

   b. International Paper shall submit a summary of the monthly and rolling 12-month totals of all emission cap pollutants for the reporting period.

   (9 VAC 5-230-50F and 80 and Condition VII.G.5 of the 8/12/09 FESOP)

V. Unbleached Pulp Mill Process Area

The emission units associated with this section of the permit are the following:

Unit ID	Emission Unit Description	Unit ID	Emission Unit Description
UPM01	Batch Digester Operation	UPM15	B Knotter
UPM02	K1 & K2 Digester Operation	UPM16	C Knotter
UPM03	A Wash Line	UPM17	D Knotter
UPM04	B Wash Line	UPM18	No. 7 Brown Stock Chest (Low Density Storage Tank)
UPM05	C Wash Line	UPM19	K1 & K2 Chip Bin Venting
UPM06	D Wash Line	UPM20	Turpentine System Operation
UPM07	A Noss Screens	UPM21	Multiple Foam Tanks
UPM08	B Noss Screens	UPM26	**D Wash HVLC System Venting**
UPM09	C Screens	UPM27	Blow Heat Accumulator
UPM10	D Screens	UPM28	D Blow Tank
UPM11	B Decker	UPM29	**K1 & K2 Chip Bin LVHC System Venting**
UPM12	D Decker	UPM30	BOD Tank (Condensate Collection Tank)
UPM13	E Decker	UPM31	Turpentine System Venting
UPM14	A Knotter		

A. Limitations

1. No owner or operator shall cause or permit to be discharged into the atmosphere from any digester systems (UPM01 & 02) any TRS in excess of 5 ppm by volume on a dry basis, corrected to 10% oxygen.
(9 VAC 5-40-1690 and 9 VAC 5-80-110)

2. The LVHC gases from the digesters (UPM01 & 02), turpentine systems (UPM20) and BOD tank (UPM30) shall be collected by the LVHC collection system and routed to the No. 6 and No. 7 Power boilers (PWR02 & 03) for destruction.
(9 VAC 5-60-100 and 9 VAC 5-80-110 and Condition VII.A.1.a of the 8/12/09 FESOP)

3. To comply with 40 CFR 63.443(a)(1) the facility shall control the HAP emissions from the following equipment systems:

   a. Each LVHC system. (See Appendix B for list of units.)

   b. Each knotter or screen system (UPM07-10 and UPM14-17) with total HAP mass emission rates greater than or equal to the rates specified in 40 CFR 63.443(a)(1)(ii)(A) or (a)(1)(ii)(B) or the combined rate specified in 40 CFR 63.443(a)(ii)(C).
   Note:

      i Emissions from the mill's knotter and screen systems are not required to be collected and controlled. These systems have been found to have HAP concentrations below the thresholds specified in 40 CFR 63.443(a)(1)(ii).

      ii Emissions from the E-decker (UPM13) are not required to be controlled since the HAP (as MeOH) content of the shower water used on this system was found to be less than the threshold specified in 40 CFR 63.443(a)(1)(iv)(B).

   c. D-Wash Line Washer and Accepts Tank (UPM06)

   d. B-Decker and Filtrate Tank (UPM11)

e. No. 1 High Density Storage Tank (BLP06)

The collection of HVLC system gases shall include the gases from the units listed in b-e above.
(9 VAC 5-60-100, 9 VAC 5-80-110 and Condition VII.A.1.b of the 8/12/09 FESOP)

4. HVLC Gases - The HVLC gases from D-Wash Line Washer and Accepts Tank (UPM06), the B-Decker and Filtrate Tank (UPM11), and the No. 1 High Density Storage Tank (BLP06) shall be collected by a closed vent system and routed to the RTO (BLP12) for destruction.
(9 VAC 5-60-100, 9 VAC 5-80-110 and Condition VII.A.1.c of the 8/12/09 FESOP)

5. RTO - The RTO used to reduce total HAP emissions shall be designed and operated at a minimum temperature of 871°C (1600°F) (3-hour rolling average) and a minimum residence time of 0.75 seconds. As an alternate MACT compliance method, the RTO shall be operated at or above the minimum temperature necessary to maintain the total HAP concentration at the outlet of the RTO at 20 parts per million or less by volume (as MeOH), corrected to 10 percent oxygen on a dry basis (3-hour rolling average). The permittee shall establish the minimum necessary RTO operating temperature based on stack test results, good engineering judgment and experience.
(9 VAC 5-60-100, 9 VAC 5-80-110 and Condition VII.A.1.d of the 8/12/09 FESOP)

6. Pulping Process Condensates - The pulping process condensates shall be collected (as specified in Condition 7) from the following equipment: each digester system (UPM01 & 02), each turpentine recovery system (UPM20), each evaporator system (CRE07, 08, 09, 10); each LVHC collection system (see Appendix B) and each HVLC collection system (see Appendix A).
(9 VAC 5-80-110, 9 VAC 5-60-100 and Condition VII.A.1.e of the 8/12/09 FESOP)

7. Collection Efficiency - The pulping process condensates collected from the equipment listed in the previous condition, shall contain at least 65% of the total HAP mass (as MeOH) from the digester system (UPM01 & 02), the turpentine system (UPM20), and evaporator systems (CRE07-10) and all of the condensates for the LVHC and HVLC collection systems (see Appendices A & B), expressed as a 15-day rolling average. As an alternate MACT compliance method, the pulping process condensates collected from the digester system, the turpentine system, evaporator systems, and the LVHC and HVLC collection systems shall contain at least 11.1 lbs of total HAP (as MeOH) per ODTP, expressed as a 15-day rolling average.
(9 VAC 5-80-110, 9 VAC 5-60-100 and Condition VII.A.1.f of the 8/12/09 FESOP)

8. Emission Controls - The pulping process condensates shall be conveyed in a closed collection system which meets the individual drain system requirements specified in 63.960, 63.961 and 63.962 of 40 CFR Part 63, Subpart RR except for closed vent systems and control devices shall be designed and operated in accordance with 40 CFR 63.443(d) and 63.450, instead of in accordance with 40 CFR 63. 693 as specified in 40 CFR 63.962(a)(3)(ii), (b)(3)(ii)(A), and (b)(5)(iii).
(9 VAC 5-80-110, 9 VAC 5-60-100 and Condition VII.A.1.g of the 8/12/09 FESOP)

9. Emission Controls - The condensate collection tank (CRE18) shall have a fixed roof and all openings shall be designed and operated with no detectable leaks as indicated by an instrument reading of <500 ppm VOC (40 CFR 60, Appendix A, Method 21) above background and vented into a closed-vent system meeting the requirements of 40 CFR 63.450 and routed to a control device that meets the requirements in 40 CFR 63.443(d). Each opening shall be maintained in a closed, sealed position at all times that the tank contains pulping condensates or HAPs except when it is necessary to use the opening for sampling, removal, or for equipment inspection, maintenance, or repair.
(9 VAC 5-80-110, 9 VAC 5-60-100 and Condition VII.A.1.h of the 8/12/09 FESOP)

10. Emission Controls - The pulping process condensates shall be treated by the condensate (steam) stripper (CRE16). The treatment of the condensates by the condensate (steam) stripper shall reduce the total HAPs by either ≥92% by weight or to remove 10.2 pounds per Oven Dried Ton of Pulp. Each HAP removed from the process condensate streams during treatment and handling by the condensate (steam) stripper shall be enclosed and vented into a closed vent system (the LVHC collection system) and routed to power boilers No. 6 or No. 7 (PWR02 or 03)for destruction. The enclosures and closed vent systems shall meet the requirements of 63.443(d) and 63.450 of 40 CFR Part 63, Subpart S.
(9 VAC 5-80-110, 9 VAC 5-60-100 and Condition VII.A.1.i of the 8/12/09 FESOP)

11. Negative Pressure Enclosures - Each enclosure shall maintain negative pressure at each enclosure or hood opening. Each enclosure or hood opening closed during the initial performance test specified in 40 CFR 63.457(a) shall be maintained in the same closed and sealed position as during the performance test at all times except when necessary to use the opening for sampling, inspection, maintenance or repairs.
(9 VAC 5-80-110, 9 VAC 5-60-100 and Condition VII.A.1.j of the 8/12/09 FESOP)

12. Positive Pressure Components - Each component of the closed-vent system used to comply with 40 CFR 63.443(c), 63.444(b), and 63.445(b) that is operated at a positive pressure and located prior to a control device shall be designed for and operated with no detectable leaks as indicated by an instrument reading of less than 500ppmv above background as measured by the procedures specified in 40 CFR 63.457(d).
(9 VAC 5-80-110, 9 VAC 5-60-100 and Condition VII.A.1.k of the 8/12/09 FESOP)

13. 40 CFR Part 63, Subpart S - Except where this permit is more restrictive than the applicable requirement the facility shall be operated in compliance with the requirements of 40 CFR Part 63, Subpart S or as described in Condition IV.D.3.c (See Parity Equipment listed in Appendix A).
(9 VAC 5-80-110, 9 VAC 5-60-90, 9 VAC 5-60-100 and Condition VII.A.1.l of the 8/12/09 FESOP)

14. Excess Emissions - Periods of excess emissions reported under 40 CFR 63.455 shall not be a violation of 40 CFR 63.443(c) and (d) provided that the time of excess emissions (excluding periods of startup, shutdown, or malfunction) divided by the total process operating time in a semi-annual reporting period does not exceed the following levels: (40 CFR 63.443(e))

    a. One percent for control devices used to reduce the total HAP emissions from the LVHC system; and

    b. Four percent for control devices used to reduce the total HAP emissions from the HVLC system; and

    c. Four percent for control devices used to reduce the total HAP emissions from both the LVHC and HVLC systems.

    (9 VAC 5-80-110 and 40 CFR 63.443(e) and Condition VII.A.1.m of the 8/12/09 FESOP)

B. Monitoring

1. Monitoring Devices - The LVHC Collection System shall be equipped with devices to continuously monitor the status of all rupture disks, pressure vacuum breakers (pvb), or other venting systems. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the LVHC Collection System is operating.
(9 VAC 5-80-110 and Condition VII.A.2.a of the 8/12/09 FESOP)

2. Monitoring Device Observation - LVHC collection system - The computer system used to continuously monitor each vent shall be equipped with an alarm to alert the operator when a release has occurred.
(9 VAC 5-80-110 and Condition VII.A.2.b of the 8/12/09 FESOP)

3. Collection Monitoring - To demonstrate compliance with the 65% collection of all HAPs (as MeOH) produced per Condition V.A.7, the permittee shall monitor/calculate, on a daily basis, the HAP (as MeOH) mass from the digester system, turpentine system, and evaporator system and the HAP (as MeOH) mass of the collected streams which will be sent to the condensate (steam) stripper for treatment. The daily monitoring shall be generated from flows, mass balance, and the annual HAP (as MeOH) testing. The daily HAP (as MeOH) mass shall be averaged over a 15-day period to determine a 15-day rolling average of the percent of HAP (as MeOH) collected. To demonstrate compliance with the alternate MACT compliance method requirement to collect at least 11.1 lbs of total HAP (as MeOH) per ODTP, the permittee shall determine on a daily basis the total HAP mass (as MeOH) collected from the digester system, the turpentine system, evaporator systems, and the LVHC and HVLC collection systems being sent to the condensate (steam) stripper for treatment. The daily determination shall be made using the daily average combined flow rate to the condensate (steam) stripper feed tank, and the representative average total HAP (as MeOH) concentration in this steam as determined using Condition V.0. The daily HAP mass (as MeOH) collected shall be averaged over a 15-day period to determine a 15-day rolling average of the amount of HAP (as MeOH) collected.
(9 VAC 5-80-110 and Condition VII.A.2.c of the 8/12/09 FESOP)

4. Condensate (Steam) Stripper Monitoring - To demonstrate compliance with the 92% reduction of HAPs per Condition V.A.10, the condensate (steam) stripper (CRE16) shall be equipped with a device to continuously measure and record the process wastewater feed rate; the steam feed rate; and the process wastewater column feed temperature. Monitoring shall be done using 3-hour rolling averages for the steam to feed ratio and process wastewater column feed temperature. The steam feed rate and process wastewater feed rate shall be used to determine the steam to feed ratio. Each monitoring device shall be installed, maintained and calibrated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the condensate (stream) stripper is operating.
(9 VAC 5-80-110, 9 VAC 5-50-20C, 9 VAC 5-50-260, 9 VAC 5-60-100 and Condition VII.A.2.d of the 8/12/09 FESOP)

5. Condensate (Steam) Stripper (CRE16) - An alarm shall be used to signal when the monitoring parameters (the process wastewater feed rate; the steam feed rate; and the process wastewater column feed temperature of the condensate (steam) stripper) drift out of the acceptable range triggering the need for prompt corrective action. The permittee shall keep a log summarizing each event (date and time of commencement and completion, parameter monitoring exceedances) and corrective action taken.
(9 VAC 5-80-110, 9 VAC 5-50-50H and Condition VII.A.2.e of the 8/12/09 FESOP)

6. Enclosures and Closed Vent Systems Inspections - Each enclosure and closed vent system used to comply with Subpart S shall have a visual inspection conducted once during each calendar month, with at least 21 days elapsed time between inspections, to ensure each opening is maintained in the closed position and sealed. The permittee shall prepare and maintain a site-specific inspection plan including a drawing or schematic of the components of applicable affected equipment. The inspection shall include the ductwork, piping, enclosures, and connections to covers for visible evidence of defects. An inspection log shall be kept containing the information specified in 40 CFR 63.454(b).
(9 VAC 5-80-110, 9 VAC 5-60-100 and Condition VII.A.2.f of the 8/12/09 FESOP)

7. Negative Pressure Enclosures - Each enclosure and closed-vent system shall demonstrate initially and annually that each enclosure opening is maintained at negative pressure as specified in 63.457(e) of 40 CFR Part 63, Subpart S.
(9 VAC 5-80-110, 9 VAC 5-60-100 and Condition VII.A.2.g of the 8/12/09 FESOP)

8. Positive Pressure Enclosures - Each positive pressure closed-vent system shall demonstrate initially and annually no detectable leaks as specified in 63.450(c) of 40 CFR Part 63, Subpart S measured by procedures in 63.457(d) of 40 CFR Part 63, Subpart S.
(9 VAC 5-80-110, 9 VAC 5-60-100 and Condition VII.A.2.h of the 8/12/09 FESOP)

9. Closed Collection System - Each pulping process condensate closed collection system shall be visually inspected once during each calendar month, with at least 21 days elapsed time between inspections. Recordkeeping requirements shall meet 63.454 of 40 CFR Part 63, Subpart S. Each collection tank shall be operated with no detectable leaks as specified in 63.446(d)(2)(i) of 40 CFR Part 63, Subpart S.
(9 VAC 5-80-110, 9 VAC 5-60-100 and Condition VII.A.2.i of the 8/12/09 FESOP)

10. RTO - The RTO (BLP12) shall be equipped with a device to continually measure and record the temperature. There shall be an alarm system that sounds if the 3-hour rolling average RTO temperature falls below 871°C (1600°F), or in the alternate MACT compliance method, if the 3-hour rolling average falls below the minimum operating temperature required to maintain a total HAP concentration at the outlet of the RTO of 20 ppmv (as MeOH), corrected to 10 percent oxygen on a dry basis.
(9 VAC 5-60-100, 9 VAC 5-80-110 and Condition VII.A.2.j of the 8/12/09 FESOP)

11. Condensate Collection Tank - Each condensate collection tank (CRE18) shall be operated with no detectable leaks as specified in 63.446(d)(2)(i) of 40 CFR Part 63, Subpart S measured initially and annually by the procedures in 63.457(d) of 40 CFR Part 63, Subpart S.
(9 VAC 5-80-110, 9 VAC 5-60-100 and Condition VII.A.2.k of the 8/12/09 FESOP)

CAM Conditions

12. The permittee shall monitor, operate, calibrate and maintain the LVHC Collection System controlling the gases from the digesters, evaporators, condensate (steam) stripper, turpentine system and the chip bins according to the following:

Emission Unit		LVHC Collection System Vents Emission Units: UPM01, UPM02, UPM19, UPM20 Emission Points: PWRSV01 and PWRSV02 Control Devices: PWR02 and PWR03
Description		Digesters, evaporators, condensate (steam) stripper, turpentine system and chip bins
Control Device		No. 6 and No. 7 Power Boilers
Applicable Requirement		9 VAC 5-40-1690
Regulated Pollutant		TRS
Emission Limit		5 ppm @ 10% O_2
I. CAM Indicator		Routing process gases to power boilers for incineration, limiting process venting as required by 40 CFR Part 63 (MACT), Subpart S.
Measurement Approach		Vent monitoring systems
Monitoring Frequency		Continuous monitoring of LVHC Collection System emergency bypass vents
Justification		No direct monitoring of the boilers is required for TRS incineration per VADEQ 4/11/95 letter. This determination was made based on the revisions to 40 CFR Part 60 (NSPS) Subpart BB which deleted the requirement to monitor combustion temperature from the power boilers.
II. Indicator Range		Process venting to be less than 1% as required by MACT Subpart S.
III. Performance Criteria		
Data	Detector Location	Located at each emergency bypass vent in the LVHC Collection System
	Sensor specs	The various vents have various methods of monitoring. (i.e., pressure vacuum breakers, temperature, rupture disks)
	Acquisition Procedure	Proficy data collection system
	Data Recording System	PI data historian
QA/QC Practices and Criteria		Per MACT QA/QC plan
Data Collection Procedures		Proficy data collection system
Averaging Period		Annual

(9 VAC 5-80-110 E and 40 CFR 64)

13. The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9.
(9 VAC 5-80-110 E and 40 CFR 64.6 (c))

14. At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment, except as specified in the QA/QC Plan for equipment that is subject to an extended temporary shutdown.
(9 VAC 5-80-110 E and 40 CFR 64.7 (b))

15. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the LVHC Collection System is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions.
(9 VAC 5-80-110 E and 40 CFR 64.7 (c))

16. Upon detecting an excursion or exceedance, the permittee shall restore operation of the LVHC Collection System (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable.
(9 VAC 5-80-110 E and 40 CFR 64.7 (d)(1))

17. Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
(9 VAC 5-80-110 E and 40 CFR 64.7(d)(2))

18. If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Department and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
(9 VAC 5-80-110 E and 40 CFR 64.7(e))

19. If the accumulation of exceedances or excursions exceeds 5% duration of the operating time for the LVHC Collection System for a semiannual reporting period, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:

    a. Improved preventative maintenance practices;

    b. Process operation changes;

    c. Appropriate improvements to control methods;

    d. Other steps appropriate to correct control performance; and

    e. More frequent or improved monitoring.

    (9 VAC 5-80-110 E and 40 CFR 64.8(a) and (b))

C. Recordkeeping and Reporting

1. Records - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Department. These records shall include, but are not limited to:

    a. Number of minutes each venting system vents from the LVHC Collection System to the atmosphere and all TRS release event minute records.

    b. Daily monitoring of the percent, or alternatively the amount, of HAP (as MeOH) collected and 15-day rolling average.

    c. Daily amount of HAPs (as MeOH) sent to the condensate (steam) stripper. (This is only necessary when compliance is based on the 10.2 pounds per Oven Dried Ton of Pulp (ODTP) limit.)

    d. Daily amount of ODTP processed. (This is only necessary when condensate collection compliance is based on the 11.1 lbs per ODTP requirement or when condensate treatment compliance is based on the 10.2 pounds per ODTP limit.)

    e. Daily amount of HAPs (as MeOH) removed by condensate (steam) stripper. (This is only necessary when compliance is based on the 10.2 pounds per ODTP limit).

    f. Monthly visual observation logs of the LVHC, HVLC and the condensate closed collection systems including the information specified in 40 CFR 63.454(b) (see Appendices A & B).

    g. RTO temperature data/records (BLP12).

    h. Annual monitoring of the condensate collection tank, condensate closed collection system, and closed-vent systems.

    i. Continuous monitoring system calibrations and equipment checks, percent operating time, and resultant excess emissions.

    j. Operation and control device monitoring records for the condensate collection system and the LVHC collection system.

    k. Scheduled and unscheduled maintenance and operator training of air pollution control equipment, monitoring devices, and process equipment which affect emissions.

l. Initial and continuing compliance testing.

These records shall be available at the facility for inspection by the Department and shall be current for the most recent 5 years.
(9 VAC 5-80-110 and Condition VII.A.5 of the 8/12/09 FESOP)

2. Semi-Annual Reports - The permittee shall submit excess emission and continuous monitoring system reports for the TRS collection system, the LVHC system, the HVLC system, and the condensate collection system to the Department, within 30 days after the end of each semi-annual period. Each semi-annual report shall include the following:

   a. The date and time identifying each period during which the CMS was inoperative except for zero (low-level) and high-level checks;

   b. The date and time identifying each period during which the CMS was out of control, as defined in 63.8(c)(7) of 40 CFR Part 63, Subpart A;

   c. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions and parameter monitoring exceedances, as defined in 40 CFR Part 63, Subpart S, that occurs during startups, shutdowns, and malfunctions of the affected source;

   d. The specific identification (i.e., the date and time of commencement and completion) of each time period of excess emissions and parameter monitoring exceedances, as defined in the relevant standards, that occurs during periods other than startups, shut-downs, and malfunctions of the affected source;

   e. The nature and cause of any malfunction (if known);

   f. The corrective action taken or preventive measures adopted;

   g. The nature of the repairs or adjustments to the CMS that was inoperative or out of control;

   h. The total process operating time during the reporting period.

   i. One copy of the semi-annual report shall be submitted to the U.S. Environmental Protection Agency at the address below:

      Associate Director
      Office of Air Enforcement (3AP10)
      U. S. Environmental Protection Agency, Region III
      1650 Arch Street
      Philadelphia, PA 19103-2029

   (9 VAC 5-80-110, 9 VAC 5-170-160 and 9 VAC 5-50-50)

3. Notifications - The permittee shall furnish written notification to the Department of any changes to the sources of shower water to the lines listed in a-f below. Current sources are as follows:

   a. A & B Washer systems (UPM03 & 04) – D-Decker filtrate (UPM12) or E-Decker filtrate (UPM13)

   b. D-Decker system (UPM12) – F-Bleach Line pre-O_2 press filtrate (BLP05).

   c. C-Washer system (UPM05) – E-Decker filtrate (UPM13).

   d. E-Decker system (UPM13) – either stripped (clean) condensate, paper machine white water or hot fresh water.

   e. C-Wash Line Knotters and Screens (UPM09 & 16) – E-Filtrate Tank (UPM13).

f. D-Wash Line Knotters and Screens (UPM10 & 17) – D-Washer Seal (Filtrate) Tank (UPM06)

In addition, the permittee shall notify the Department when any changes occur at the facility (e.g., operational or process changes, operating scenario changes, etc.) that could potentially increase the amount of HAP in the decker filtrate waters above the 400 ppm HAP (as MeOH) threshold.
(9 VAC 5-80-110 and Condition VII.A.4 of the 8/12/09 FESOP)

D. Testing

Continuous Compliance Testing - To demonstrate compliance with the 65% collection of all HAPs (as MeOH) produced, the permittee shall perform testing for the HAP (as MeOH) mass from the streams named in Condition V.A.6 and the HAP (as MeOH) mass of the collected streams which shall be sent to the condensate (steam) stripper for treatment. The daily HAP (as MeOH) mass shall be averaged over a 15-day period to determine a 15-day rolling average of the percent of HAP (as MeOH). Alternatively, to demonstrate compliance with the 11.1 lbs per Oven Dried Ton of Pulp condensate collection requirement, the permittee shall perform testing to determine the representative average total HAP (as MeOH) concentration in the combined stream to the condensate (steam) stripper feed tank. The testing shall be conducted in a manner suitable to establish a 15-day average total HAP (as MeOH) concentration. The testing shall be performed once per permit term.
(9 VAC 5-80-110 and Condition VII.A.3 of the 8/12/09 FESOP)

VI. Caustic Recovery Process Area

The emission units associated with this section of the permit are the following:

Unit ID	Emission Unit Description	Unit ID	Emission Unit Description
CAU01	No. 2 Lime Kiln	CAU07 (cont)	Causticizer Standpipe
CAU02	No. 3 Lime Kiln		White Liquor Clarifiers (4)
CAU03	No. 4 Lime Kiln		White Liquor Standpipes (2)
CAU04	No. 5 Slaker		White Liquor Day Tank
CAU05	No. 6 Slaker		Reserve Tanks (6) (see Section II)
CAU06	**Green Liquor Handling**	CAU08	**Lime Mud Handling**
	Green Liquor Surge Tank		Unwashed Mud Mix Tank
	Green Liquor Spill Tank		Lime Mud Pressure Filter Feed Tanks (2)
	Green Liquor Clarifiers (3)		Lime Mud Pressure Filters (2)
	No. 3 Liquor Clarifier (WL or GL)		Mud Washer
	Green Liquor Standpipe		Washed Mud Mix Tank
	Green Liquor Day Tank		Lime Mud Storage Tanks (4)
	Dregs Filter Mix Tank		Dewatering Aid Tank
	Dregs Filter Hood		Precoat Filter Vacuum Pumps (3)
	Dregs Filter Vacuum Pump	CAU09	**Lime Handling**
	Dregs Filter Dump Tank	CAU10	**Fillback Storage**
	Reserve Tanks (6) (see Section II)		Fillback Tank
CAU07	**White Liquor Handling**		Fillback Standpipe
	Grits Mix Tank	CAU11	No. 2 Lime Kiln Mud Precoat Filter
	Grits Washers (2)	CAU12	No. 3 Lime Kiln Mud Precoat Filter
	Grits Washwater Return Standpipe	CAU13	No. 4 Lime Kiln Mud Precoat Filter
	Causticizers (8)		

A. Limitations

1. Particulate Matter emissions from the three Lime Kilns (CAU01, 02 and 03) shall be controlled by Venturi Scrubbers. The Venturi Scrubbers shall be provided with adequate access for inspection and shall be in operation when the Lime Kilns are operating.
(9 VAC 5-80-110, 9 VAC 5-230-50F and Condition VII.B.1 of the 8/12/09 FESOP)

2. The permittee must ensure that the concentration of PM in the exhaust gases discharged to the atmosphere from the three lime kilns (CAU01, 02, and 03) is less than or equal to the PM emission limits established under 40 CFR 63.862(a)(1)(i) and (ii) of Subpart MM.

   PM emission limits for the three lime kilns shall be established as specified in 40 CFR 63.862(a)(1)(i) and (ii) using the methods in 40 CFR 83.865(a)(1) and (2). The limits must be reestablished if either of the following actions occurs:

   a. The air pollution control system for any existing lime kiln is modified (as defined in 40 CFR 63.861) or replaced;

   b. Any lime kiln for which an emission limit was established is shut down for more than 60 consecutive days.

   The limits shall be approved by the Department. The permittee shall show compliance with the established limits as defined in 40 CFR 63.865(b).
   (9 VAC 5-80-110 and 40 CFR 63.862(a)(1)(i) and (ii))

3. Corrective action shall be implemented for the Lime Kilns (CAU01, 02 and 03) if any 3-hour average parameter value is outside the range of values established during the initial performance test in 40 CFR 63.864(j). The units shall be considered in violation when six or more 3-hour average parameter values within any 6-month reporting period are outside the range of values (non SSM events) established in 40 CFR 63.864(j).
(9 VAC 5-80-110, 40 CFR 63.862(a)(1)(ii) and 40 CFR 63.864(j) & (k))

4. No owner or operator of any Lime Kilns (CAU01, 02 and 03) shall cause or permit to be discharged into the atmosphere any particulate matter emissions in excess of 1.00 lb/ADTP.
(9 VAC 5-40-1680 and 9 VAC 5-80-110)

5. No owner or operator of any Slaker Tank Units (CAU04 and 05) shall cause or permit to be discharged into the atmosphere any particulate matter emissions in excess of 0.30 lb/ADTP.
(9 VAC 5-40-1680 and 9 VAC 5-80-110)

6. At all times, including periods of startup, shutdown and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions.
(9 VAC 5-40-20E and 9 VAC 5-80-110)

B. Monitoring

1. Each Venturi Scrubber for the Lime Kilns (CAU01, 02 and 03) shall be equipped with a Continuous Parameter Monitoring System (CPMS). The CPMS shall include a device to continuously measure: the differential pressure drop across the scrubber and the scrubber liquid flow rate. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. The CPMS shall track the parameter values on a 3-hour rolling average. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the Lime Kilns are operating.

   The permittee is considered in violation of Condition A.2 of this section when six or more 3-hour average parameter values within any 6-month period are outside the range of values established in the performance test. See condition A.3 of this section.

   The permittee must implement corrective action as specified in the startup, shutdown and malfunction plan prepared in accordance with 40 CFR 63.866(a) whenever the 3-hour average of any lime kiln scrubber CPMS parameter is outside its established operating range (from performance testing), excluding average CPMS values outside the established operating range caused by startup, shutdown and malfunction.
   (9 VAC 5-80-110, 40 CFR 63.864(k)(1)(ii), (k)(2)(iii) and Condition VII.B.2.a of the 8/12/09 FESOP)

2. A Continuous Emission Monitoring System shall be installed to measure and record the emissions of TRS from the lime kiln stacks as ppmvd. A CEMS shall be installed to measure and record the percentage oxygen in the stack gases of each lime kiln. Except where otherwise indicated in this condition, both CEMS shall be installed, calibrated, maintained, audited and operated in accordance with requirements of the Department's approved procedures which are equivalent to the requirements of 40 CFR 60.13 and 40 CFR Part 60, Appendix F. The CEMS shall be audited in conformance with the appropriate schedules as defined by the CEMS QA/QC Plan required to be prepared per condition IV.G.3. The SPAN VALUE for the TRS monitor shall be established by using historical data and approved by the Department. Data from each monitoring system shall be reduced to 24-hour block averages per calendar day by calculating the arithmetic mean of the appropriate 24 contiguous valid 1-hour averages. Using the corresponding 24-hour block TRS and oxygen averages, calculate a TRS concentration as ppmvd corrected to 10% oxygen, using the equation in 9 VAC 5-40-1780 B.3. Valid TRS/oxygen data shall be obtained for no less than 75% of the operating hours of each quarter. Section 4 of 40 CFR 60 Appendix F shall be the basis for determining valid data. A 24-hour block average shall be considered valid if at least 50% of the operating hours in the 24-hour period are valid data hours.
(9 VAC 5-80-110 and Condition VII.B.2.b of the 8/12/09 FESOP)

3. The permittee shall have established operating ranges for each Lime Kiln scrubber CPMS in accordance with 40 CFR 63.864(j).
(9 VAC 5-80-110 and 40 CFR 63.864(j))

CAM Conditions

4. The permittee shall monitor, operate, calibrate and maintain the venturi scrubbers controlling the Lime Kilns (CAU01, 02 and 03) according to the following:

Emission Unit		No. 2 Lime Kiln		No. 3 Lime Kiln		No. 4 Lime Kiln	
Description		7.3 ton/hr CaO Lime Kiln		13.0 ton/hr CaO Lime Kiln		15.0 ton/hr CaO Lime Kiln	
Control Device		Venturi Scrubber		Venturi Scrubber		Venturi Scrubber	
Applicable Requirement		9 VAC 5-40-1680 and 40 CFR 63.862(a)(1)(i) and (ii)		9 VAC 5-40-1680 and 40 CFR 63.862(a)(1)(i) and (ii)		9 VAC 5-40-1680 and 40 CFR 63.862(a)(1)(i) and (ii)	
Regulated Pollutant		Particulate Matter		Particulate Matter		Particulate Matter	
Emission Limit		1.00 lb/ADTP MACT* limit		1.00 lb/ADTP MACT* limit		1.00 lb/ADTP MACT*limit	
I. CAM Indicator		Scrubber pressure differential and scrubber liquid flow rate		Scrubber pressure differential and scrubber liquid flow rate		Scrubber pressure differential and scrubber liquid flow rate	
Measurement Approach		Continuous parameter monitoring system, as currently required by the MACT*		Continuous parameter monitoring system, as currently required by the MACT*		Continuous parameter monitoring system, as currently required by MACT*	
Monitoring frequency (each Kiln)		At least once every 15-minute period using procedures in 40 CFR 63.8(c). Four 15-minute averages comprise the one-hour averages and three one-hour averages comprise the three-hour rolling average					
Justification		Differential pressure and scrubbing liquid flow rate are the appropriate control device performance indicators to monitor in accordance with the MACT* requirements for chemical recovery system process units using a wet scrubber for particulate matter control					
II. Indicator Range		Scrubber pressure differential 18.0 psig minimum pressure drop (3-hr rolling average)	Scrubber liquid flow rate 300.0 gpm, minimum flow rate to scrubber (3-hr rolling average)	Scrubber pressure differential 18.0 psig minimum pressure drop (3-hr rolling average)	Scrubber liquid flow rate 300.0 gpm, minimum flow rate to scrubber (3-hr rolling average)	Scrubber pressure differential 22.0 psig minimum pressure drop (3-hr rolling average)	Scrubber liquid flow rate 810.0 gpm, minimum flow rate to scrubber (3-hr rolling average)
		These indicators were established during the most recent performance test for the MACT*		These indicators were established during the most recent performance test for the MACT*		These indicators were established during the most recent performance test for the MACT*	
III. Performance Criteria							
Data Representativeness	Detector Location	Sample lines at gas inlet and gas outlet of scrubber feed	Liquid flow sensor in liquid recirculation line	Sample lines at gas inlet and gas outlet of scrubber feed	Liquid flow sensor in liquid recirculation line	Sample lines at gas inlet and gas outlet of scrubber feed	Liquid flow sensor in liquid recirculation line
	Sensor Specs						
	(a) Range	0 to 40 in W.G.	0 to 1000 gpm	0 to 40 in W.G.	0 to 1500 gpm	0 to 40 in W.G.	0 to 2000 gpm
	(b) Accuracy	± 0.15% of span	±0.25% of reading	± 0.15% of span	±0.25% of reading	± 0.15% of span	±0.25% of reading
	Acquisition Procedure	1-minute data and 15-minute data are combined to create 3-hour rolling average					
	Data Recording system	PI data historian					
QA/QC Practices and Criteria		Per the MACT* QA/QC Plan					
Data Collection Procedures		Proficy data collection system and PI data historian					
Averaging Period		3-hr rolling					

*MACT refers to 40 CFR Part 63 Subpart MM (or referred to as the Combustion MACT)

(9 VAC 5-80-110 and 40 CFR 64)

5. The permittee shall monitor, operate, calibrate and maintain the venturi scrubbers controlling the Slakers (CAU04 and 05) according to the following:

Emission Unit		No. 5 Slaker (CAU04)		No. 6 Slaker (CAU05)	
Description		**Lime Slaker**		**Lime Slaker**	
Control Device		Inverted Venturi Scrubber		Inverted Venturi Scrubber	
Applicable Requirement		9 VAC 5-40-1680		9 VAC 5-40-1680	
Regulated Pollutant		Particulate Matter		Particulate Matter	
Emission Limit		0.3 lb/ADTP		0.3 lb/ADTP	
I. CAM Indicator		Scrubber pressure differential and scrubber liquid flow rate		Scrubber pressure differential and scrubber liquid flow rate	
Measurement Approach		Continuous parameter monitoring system		Continuous parameter monitoring system	
Monitoring frequency (each slaker)		At least once every 15-minute period. Four 15-minute averages comprise the one-hour averages and three one-hour averages comprise the three-hour rolling average			
Justification		The measurement parameters, approach, and frequency are similar to those required for the MACT* sources			
II. Indicator Range		Scrubber Fan Amps (3-hr rolling average)	Scrubber Liquid Flow Rate (3-hr rolling average)e	Scrubber Fan Amps (3-hr rolling average)	Scrubber Liquid Flow Rate (3-hr rolling average)
III. Performance Criteria					
Data Representativeness	Detector Location	At Scrubber Fan Motor	Liquid flow sensor in liquid recirculation line	At Scrubber Fan Motor	Liquid flow sensor in liquid recirculation line
	Sensor Specs				
	(a) Range	0-100 amps	0-400 gpm	0-100 amps	0-400 gpm
	(b) Accuracy	± 0.5%	±0.25% of reading	± 0.5%	±0.25% of reading
	Acquisition Procedure	TBD**	TBD**	TBD**	TBD**
	Data Recording system	PI data historian		PI data historian	
QA/QC Practices and Criteria		QA/QC per manufacturer's standard			
Data Collection Procedures		Proficy data collection system and PI data historian			
Averaging Period		3-hour rolling average			

*MACT refers to 40 CFR Part 63 Subpart MM (or referred to as the Combustion MACT)
**TBD means To Be Determined

(9 VAC 5-80-110 and 40 CFR 64)

6. The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9.
(9 VAC 5-80-110E and 40 CFR 64.6(c))

7. At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment, except as specified in the QA/QC Plan for equipment that is subject to an extended temporary shutdown.
(9 VAC 5-80-110E and 40 CFR 64.7(b))

8. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that each of the Lime Kilns and Slakers are operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions.
(9 VAC 5-80-110E and 40 CFR 64.7(c))

9. Upon detecting an excursion or exceedance, the permittee shall restore operation of the affected Lime Kiln or Slaker (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable.
(9 VAC 5-80-110E and 40 CFR 64.7(d)(1))

10. Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
(9 VAC 5-80-110E and 40 CFR 64.7(d)(2))

11. If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Department and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
(9 VAC 5-80-110E and 40 CFR 64.7(e))

12. If the accumulation of exceedances or excursions exceeds 5% duration of the operating time for each of the Lime Kilns or Slakers for a semiannual reporting period, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:

    a. Improved preventative maintenance practices;

    b. Process operation changes;

    c. Appropriate improvements to control methods;

    d. Other steps appropriate to correct control performance; and

    e. More frequent or improved monitoring.

    (9 VAC 5-80-110 E and 40 CFR 64.8(a) and (b))

C. Recordkeeping and Reporting

1. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Department. These records shall include, but are not limited to:

    a. The production rates of CaO in tons/day for each lime kiln.

    b. Daily operating periods for each lime kiln to show compliance with 9 VAC 5-40-1770C.

    c. CPMS parameter monitoring data for the lime kiln scrubbers including any period when the operating parameter levels were inconsistent with the level established during the initial performance test, with a

brief explanation of the cause of the deviation, the time the deviation occurred , the time corrective action was initiated and completed, and the corrective action taken.

d. Records and documentation of supporting calculations for compliance determinations with 40 CFR 63.865(a)-(e).

e. Records of monitoring parameter ranges established for each lime kiln scrubber in accordance with 40 CFR 63.864(j) and 63.867(b).

f. Daily 24-hour average TRS concentrations, 24-hour average oxygen concentrations, and the corrected TRS concentrations for each lime kiln in accordance with 9 VAC 5-40-1780B.

g. TRS CEMS records from each lime kiln. (This does not include one-minute data.).

h. Continuous monitoring system (TRS CEMS) calibrations and calibration checks, percent operating time, and excess emissions.

i. Scheduled and unscheduled maintenance and operator training of the Lime Kilns and associated pollution control equipment.

j. Records of stack test data.

k. The permittee must maintain records of any occurrence when corrective action is required under 40 CFR 63.864(k)(1)(ii), and when a violation is noted under 40 CFR 63.864(k)(2)(i) or (iii).

These records shall be available at the facility for inspection by the Department and shall be current for the most recent 5 years.
(9 VAC 5-80-110, 40 CFR 63.866 and Condition VII.B.3. of the 8/12/09 FESOP)

2. The permittee shall furnish written reports to the Department of excess emissions from any process monitored by a continuous monitoring system (CEMS) (TRS monitoring for the Lime Kilns) on a quarterly basis, postmarked no later than the 30th day following the end of the calendar quarter. These reports shall include, but are not limited to the following information:

   a. The magnitude of excess emissions, any conversion factors used in the calculation of excess emissions, and the date and time of commencement and completion of each period of excess emissions.

   b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the process, the nature and cause of the malfunction (if known), the corrective action taken or preventative measures adopted.

   c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

   d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in that report.

   e. The number of valid hours for each TRS/oxygen continuous emission monitoring system during the quarter.

   f. The number of operating hours for each kiln during the quarter.

   (9 VAC 5-80-110)

3. The permittee shall furnish written excess emission reports to the Department for the CPMS on the Lime Kiln scrubbers.

   a. The owner or operator must report quarterly if measured parameters meet any of the conditions specified in 40 CFR 63.864(k)(1) or (2) of Subpart MM. This report must contain the information specified in 40 CFR 63.10(c) of as well as the number and duration of occurrences when the source met or exceeded the conditions in 40 CFR 63.864(k)(1), and the number and duration of occurrences when the source met or exceeded the conditions in 40 CFR 63.864(k)(2). Reporting excess emissions below the violation thresholds of 40 CFR 63.864(k) does not constitute a violation of the applicable standard.

   b. When no exceedances of parameters have occurred, the owner or operator must submit a semiannual report stating that no excess emissions occurred during the reporting period.

   c. Quarterly and semiannual reports are to be postmarked no later than the 30th day following the end of the calendar quarter and semiannual period, respectively.

   (9 VAC 5-80-110 and 40 CFR 63.864)

4. The permittee shall comply with the additional reporting requirements for HAP Metals standards as specified in 40 CFR 63.867(b).
   (9 VAC 5-80-110 and 40 CFR 63.867(b))

D. Testing

Compliance Assurance Monitoring (CAM) testing shall be conducted on the slakers to establish parametric indicator ranges (as specified in Condition B.5) for the control of Particulate Matter from the slakers to prove compliance with the emission limits contained in Condition A.5. The tests shall be performed, and reported within 180 days after the issuance of this permit. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30, and the test methods and procedures contained in 9 VAC 5-40 Article 13. The details of the tests are to be arranged with the Department. The permittee shall submit a test protocol at least 30 days prior to testing. One copy of the test results shall be submitted to the Department.
(9 VAC 5-50-30, 9 VAC 5-80-110, 40 CFR 64.4(d) & (e) and 9 VAC 5-40 Article 13)

VII. Chemical Recovery Process Area

The emission units associated with this section of the permit are the following:

Unit ID	Emission Unit Description	Unit ID	Emission Unit Description
CRE01	**No. 4 Recovery Furnace**	CRE11(cont)	#2 Dump tank
	4 RF saltcake mix tank		#2 Weak black liquor tank
CRE02	**No. 5 Recovery Furnace**		#3 Weak black liquor tank
	5 RF precipitator mix tank		#1 Dump tank
	5 RF saltcake mix tank	CRE12	**Intermediate Liquor Storage**
CRE03	**No. 6 Recovery Furnace**		BLOX foam tank
	6 RF precipitator mix tank		Reserve tanks (6) (See Section II)
CRE04	**No. 4 Rec. Smelt Dissolving Tank**		#3 Heavy Black liquor tank
CRE05	**No. 5 Rec. Smelt Dissolving Tank**	CRE13	**Heavy Black Liquor Storage**
CRE06	**No. 6 Rec. Smelt Dissolving Tank**		64% black liquor tank
	6 RF saltcake mix tank	CRE16	**Condensate Stripper System**
CRE07	**D Set Evaporators**		**Stripper Feed Tank**
CRE08	**E Set Evaporators**	CRE17	**BLOX System Tanks (4)**
CRE09	**F Set Evaporators**	CRE18	**LVHC Collection System Drains**
CRE10	**G Set Evaporators**	CRE19	**Stripper Off Gas System Drains**
CRE11	**Weak Black Liquor Storage**	CRE22	**BLOX HVLC Gas Collection System Drains**
	#1 Weak Black Liquor Tank		

A. Limitations

1. No owner or operator shall cause or permit to be discharged into the atmosphere from all Recovery Furnace Units (CRE01, 02 and 03) any particulate emissions in excess of 3.00 lb/ADTP.
(9 VAC 5-40-1680 and 9 VAC 5-80-110)

2. No owner or operator shall cause or permit to be discharged into the atmosphere from all Smelt Dissolving Tank Units (CRE04, 05 and 06) any particulate emissions in excess of 0.75 lb/ADTP.
(9 VAC 5-40-1680 and 9 VAC 5-80-110)

3. The permittee must ensure that the concentration of PM in the exhaust gases discharged to the atmosphere from the recovery furnace (CRE01, 02, and 03) and the smelt dissolving tank (CRE04, 05 and 06) sources is less than or equal to the PM emission limits established under 40 CFR 63.862(a)(1)(ii) of Subpart MM.

   PM emission limits for the smelt dissolving tanks and the recovery furnaces shall be established as specified in 40 CFR 63.862(a)(1)(ii) using the methods in 40 CFR 83.865(a)(1) and (2). The limits must be reestablished if either of the following actions occurs:

   a. The air pollution control system for any existing Kraft recovery furnace, smelt dissolving tank, or lime kiln is modified (as defined in 40 CFR 63.861) or replaced;

   b. Any Kraft recovery furnace, smelt dissolving tank for which an emission limit was established is shut down for more than 60 consecutive days.

   The limits shall be approved by the Department. The permittee shall show compliance with the established limits as defined in 40 CFR 63.865(b).
   (9 VAC 5-80-110 and 40 CFR 63.862(a)(1)(ii))

4. No owner or operator shall cause or permit to be discharged into the atmosphere from the Recovery Furnace Units (CRE01 & 02) any total reduced sulfur (TRS) in excess of 20 ppm by volume on a dry basis, corrected to 8% oxygen.
(9 VAC 5-40-1690 and 9 VAC 5-80-110)

5. No owner or operator shall cause or permit to be discharged into the atmosphere from the Recovery Furnace Unit (CRE03) any TRS in excess of 5 ppm by volume on a dry basis, corrected to 8% oxygen.
(9 VAC 5-40-1690 and 9 VAC 5-80-110)

6. No owner or operator of any Multiple-Effect Evaporator Systems (CRE07, 08, 09 and 10) shall cause or permit to be discharged into the atmosphere any TRS in excess of 5 ppm by volume on a dry basis, corrected to 10% oxygen.
   (9 VAC 5-40-1690 and 9 VAC 5-80-110)

7. No owner or operator of any Condensate (Steam) Stripper Systems (CRE16) shall cause or permit to be discharged into the atmosphere any TRS in excess of 5 ppm by volume on a dry basis, corrected to 10% oxygen.
   (9 VAC 5-40-1690, 40 CFR 60.283 and 9 VAC 5-80-110)

8. No owner or operator of all Smelt Dissolving Tank Units (CRE04, 05 and 06) shall cause or permit to be discharged into the atmosphere any TRS in excess of 0.033 pounds per ton of black liquor solids as H_2S.
   (9 VAC 5-40-1690 and 9 VAC 5-80-110)

9. Corrective action shall be implemented for the Smelt Dissolving Tank Units (CRE04, 05 and 06) if any 3-hour average parameter value is outside the range of values established during the initial performance test in 40 CFR 63.864(j). The units shall be considered in violation when six or more 3-hour average parameter values within any 6-month reporting period are outside the range of values (non SSM events) established in 40 CFR 63.864(j).
   (9 VAC 5-80-110, 40 CFR 63.862(a)(1)(ii) and 40 CFR 63.864(j) & (k))

10. Visible emissions from the Recovery Furnaces (CRE01, 02 and 03) shall not exceed 35% opacity. The permittee shall implement corrective action if the average of 10 consecutive 6-minute averages results in an opacity of greater than 20%. The units shall be considered in violation of 40 CFR 63.862 if the opacity is greater than 35% for 6 percent or more of the operating time (non SSM events) within any quarterly period.
    (9 VAC 5-40-1710, 9 VAC 5-80-110, 40 CFR 63.862(a)(1)(ii) and 40 CFR 63.864(j) & (k))

11. To comply with 40 CFR 63.443(a)(1) the facility shall control the HAP emissions from the following equipment systems:

    a. Each LVHC system (See Appendix B).

    b. Nos. 1-4 BLOX Tank Vents (CRE17).

    The collection of HVLC system gases shall include the gases from the units listed in b. above.
    (9 VAC 5-80-110 and Condition VII.C.1.a of the 8/12/09 FESOP)

12. The HVLC gases from the No. 1-4 BLOX Tank Vents (CRE17) shall be collected by a closed vent system and routed to the RTO for destruction.
    (9 VAC 5-60-100, 9 VAC 5-80-110 and Condition VII.C.1.b of the 8/12/09 FESOP)

13. The RTO (BLP12) used to reduce total HAP emissions shall be designed and operated at a minimum temperature of 871°C (1600°F) (3-hour rolling average) and a minimum residence time of 0.75 seconds. As an alternate MACT compliance method, the RTO shall be operated at or above the minimum temperature necessary to maintain the total HAP concentration at the outlet of the RTO at 20 parts per million or less by volume (as MeOH), corrected to 10 percent oxygen on a dry basis (3-hour rolling average). The permittee shall establish the minimum necessary RTO operating temperature based on stack test results, good engineering judgment and experience.
    (9 VAC 5-60-100, 9 VAC 5-80-110 and Condition VII.C.1.c of the 8/12/09 FESOP)

14. The pulping process condensates shall be collected (as specified in Condition 15) from the following equipment: each evaporator system (CRE07-10), each LVHC collection system (see Appendix B) and each HVLC collection system (see Appendix A).
(9 VAC 5-80-110, 9 VAC 5-60-100 and Condition VII.C.1.d of the 8/12/09 FESOP)

15. The pulping process condensates collected from the equipment listed in the previous condition, shall contain at least 65% of the total HAP mass (as MeOH) from the digester system (UPM01 & 02), the turpentine system (UPM20), and evaporator systems (CRE07-10) and all of the condensates for the LVHC and HVLC collection systems (see Appendices A & B), expressed as a 15-day rolling average. As an alternate MACT compliance method, the pulping process condensates collected from the digester system, the turpentine system, evaporator systems, and the LVHC and HVLC collection systems shall contain at least 11.1 lbs of total HAP (as MeOH) per ODTP, expressed as a 15-day rolling average.
(9 VAC 5-80-110, 9 VAC 5-60-100 and Condition VII.C.1.e of the 8/12/09 FESOP)

16. The pulping process condensates shall be conveyed in a closed collection system which meets the individual drain system requirements specified in 63.960, 63.961 and 63.962 of 40 CFR Part 63, Subpart RR except for closed vent systems and control devices shall be designed and operated in accordance with 40 CFR 63.443(d) and 63.450, instead of in accordance with 40 CFR 63.693 as specified in 40 CFR 63.962(a)(3)(ii), (b)(3)(ii)(A), and (b)(5)(iii).
(9 VAC 5-60-100, 9 VAC 5-80-110 and Condition VII.C.1.f of the 8/12/09 FESOP)

17. The condensate collection tank shall have a fixed roof and all openings shall be designed and operated with no detectable leaks as indicated by an instrument reading of <500 ppm VOC (40 CFR 60, Appendix A, Method 21) above background and vented into a closed-vent system meeting the requirements of 40 CFR 63.450 and routed to a control device that meets the requirements of 40 CFR 63.443(d). Each opening shall be maintained in a closed, sealed position at all times that the tank contains pulping condensates or HAPs except when it is necessary to use the opening for sampling, removal, or for equipment inspection, maintenance, or repair.
(9 VAC 5-80-110, 9 VAC 5-60-100 and Condition VII.C.1.g of the 8/12/09 FESOP)

18. The pulping process condensates shall be treated by the condensate (steam) stripper (CRE16). The treatment of the condensates by the condensate (steam) stripper shall reduce the total HAPs by either ≥92% by weight or remove 10.2 pounds per ODTP. Each HAP removed from the process condensate streams during treatment and handling by the condensate (steam) stripper shall be enclosed and vented into a closed vent system (the LVHC collection system) and routed to the power boilers No. 6 or No. 7 for destruction. The enclosures and closed vent systems shall meet the requirements of 63.443(d)(4) and 63.450 of 40 CFR Part 63, Subpart S.
(9 VAC 5-80-110 and Condition VII.C.1.h of the 8/12/09 FESOP)

19. Periods of excess emissions for the condensate (steam) stripper system shall not be considered a violation as long as they do not exceed 10% of the total process operating time for the semi-annual reporting period. (40 CFR 63.446(g))
(9 VAC 5-80-110 and Condition VII.C.1.i of the 8/12/09 FESOP)

20. Excess Emissions - Periods of excess emissions reported under 40 CFR 63.455 shall not be a violation of 40 CFR 63.443(c) and (d) provided that the time of excess emissions (excluding periods of startup, shutdown, or malfunction) divided by the total process operating time in a semi-annual reporting period does not exceed the following levels: (40 CFR 63.443(e))

    a. One percent for control devices used to reduce the total HAP emissions from the LVHC system; and

    b. Four percent for control devices used to reduce the total HAP emissions from the HVLC system; and

    c. Four percent for control devices used to reduce the total HAP emissions from both the LVHC and HVLC systems.

    (9 VAC 5-80-110 and Condition VII.C.1.j of the 8/12/09 FESOP)

21. Each enclosure shall maintain negative pressure at each enclosure or hood opening. Each enclosure or hood opening closed during the initial performance test specified in 40 CFR 63.457(a) shall be maintained in the same closed and sealed position as during the performance test at all times except when necessary to use the opening for sampling, inspection, maintenance or repairs.
(9 VAC 5-80-110 and Condition VII.C.1.k of the 8/12/09 FESOP)

22. Each component of the closed-vent system used to comply with 40 CFR 63.443(c), 63.444(b), and 63.4445(b) that is operated at a positive pressure and located prior to a control device shall be designed for and operated with no detectable leaks as indicated by an instrument reading of less than 500ppmv above background as measured by the procedures specified in 40 CFR 63.457(d).
(9 VAC 5-80-110 and Condition VII.C.1.l of the 8/12/09 FESOP)

23. Except where this permit is more restrictive than the applicable requirement the facility shall be operated in compliance with the requirements of 40 CFR Part 63, Subpart S or as described in Condition IV.D.3.c (See Parity Equipment listed in Appendix A).
(9 VAC 5-60-90, 9 VAC 5-60-100, 9 VAC 5-80-110 and Condition VII.C.1.m of the 8/12/09 FESOP)

24. TRS emissions from the multiple effects evaporators (CRE07, 08, 09, and 10) and the condensate (steam) stripper (CRE16) shall be controlled by routing gases to the No. 6 power boiler (PWR02) or the No. 7 power boiler (PWR03) for destruction.
(9 VAC 5-80-110)

25. PM emissions from the No. 4 Recovery Boiler (CRE01) shall be controlled by an electrostatic precipitator (ESP). The ESP shall be provided with adequate access for inspection and shall be in operation when the recovery furnace is operating, except during periods of startup, shutdown and malfunction.
(9 VAC 5-80-110 and Condition VII.C.1.n of the 8/12/09 FESOP)

26. TRS emissions from the LVHC non-condensable gas system (which collects gases from the digesters, turpentine system and the evaporators) shall be controlled by a packed scrubber using white liquor as the scrubbing liquid. The TRS scrubber shall be provided with adequate access for inspection. This scrubber shall be in operation to the extent necessary to meet the efficiency requirement of Condition VII.B.18.
(9 VAC 5-80-110 and Condition VII.C.1.o of the 8/12/09 FESOP)

B. Monitoring

1. Continuous Emission Monitoring Systems (CEMS) shall be installed to measure and record the emissions of TRS (Total Reduced Sulfur) from the stack of the Recovery Furnaces (CRE01, 02 and 03) corrected to 8% O_2. The CEMS shall be installed, calibrated, maintained, audited and operated in accordance with the requirements of the Department's approved procedures as defined in 9 VAC 5-40-1780D. Data shall be reduced to a 24-hour average. The SPAN VALUE for the TRS monitor shall be set in accordance with 40 CFR Part 60, Subpart BB (60.284).
(9 VAC 5-40-1770, 9 VAC 5-40-1780, 9 VAC 5-80-110 and Condition VII.C.2.l of the 8/12/09 FESOP)

2. A CEMS (for TRS of the recovery boilers) quality control program which is approved by the Department shall be implemented for all TRS continuous monitoring systems.
(9 VAC 5-40-1780D, and 9 VAC 5-80-110 and Condition VII.C.2.m of the 8/12/09 FESOP)

3. The permittee shall install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS) on each exhaust stack of the No.4 Recovery Boiler (CRE01), the No.5 Recovery Boiler (CRE02) and the No.6 Recovery Boiler (CRE03). Each COMS shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period. The COMS data shall be reduced as specified in 40 CFR 63.8(g)(2) of 40 CFR 63 Subpart A.
(9 VAC 5-80-110 and 40 CFR 63.864(d))

4. A continuous opacity monitoring system (COMS) shall be used to monitor the visible emissions requirement for the recovery boilers (CRE01, 02 and 03) in lieu of 40 CFR, Part 60, Appendix A, Method 9. Each COMS shall be maintained and calibrated in accordance with manufacturer's recommendations at a minimum. (9 VAC 5-80-110 and Condition VII.C.2.n of the 8/12/09 FESOP)

5. The permittee shall install, calibrate, maintain and operate a CPMS for each Smelt Dissolving Tank Scrubber that shall be used to determine and record the fan amps and the scrubbing liquid flow rate. The CPMS shall track the parameter values on a 3-hour rolling average basis. (9 VAC 5-80-110 and 40 CFR 63.864(e)(10) and (e)(13))

6. The permittee must implement corrective action as specified in the startup, shutdown and malfunction plan prepared in accordance with 40 CFR 63.866(a) whenever either of the following occurs:

   a. The average of ten consecutive 6-minute averages from any Recovery Furnace COMS results in a measurement greater than 20% opacity.

   b. The 3-hour average of any Smelt Dissolving Tank Scrubber CPMS parameter is outside its established operating range.

   (9 VAC 5-60-100 and 9 VAC 5-80-110)

7. The permittee is considered to be in violation of the emission standards for a unit under 40 CFR 63.862 if either of the following occur:

   a. When opacity from any recovery furnace measured by a COMS is greater than 35% for 6 percent of more of the operating time within any quarterly period, excluding opacity greater than 35% caused by startup, shutdown or malfunction.

   b. When six or more 3-hour average CPMS values for a Smelt Dissolving Tank Scrubber parameter with any 6-month reporting period are outside the established operating range (from performance testing), excluding average CPMS values caused by startup, shutdown and malfunction.

   (9 VAC 5-80-110, 40 CFR 63.6(f) and (h) and 40 CFR 63.864(k)(2)(i) and (k)(2)(iii))

8. Each enclosure and closed vent system used to comply with Subpart S shall have a visual inspection conducted once during each calendar month, with at least 21 days elapsed time between inspections, to ensure each opening is maintained in the closed position and sealed. The permittee shall prepare and maintain a site-specific inspection plan including a drawing or schematic of the components of applicable affected equipment. The inspection shall include the ductwork, piping, enclosures, and connections to covers for visible evidence of defects. An inspection log shall be kept containing the information specified in 40 CFR 63.454(b). (9 VAC 5-80-110, 9 VAC 5-60-100 and Condition VII.C.2.e of the 8/12/09 FESOP)

9. Each enclosure and closed-vent system shall demonstrate initially and annually that each enclosure opening is maintained at negative pressure as specified in 63.457(e) of 40 CFR Part 63, Subpart S. (9 VAC 5-80-110, 9 VAC 5-60-100 and Condition VII.C.2.f of the 8/12/09 FESOP)

10. Each positive pressure closed-vent system shall demonstrate initially and annually no detectable leaks as specified in 63.450(c) of 40 CFR Part 63, Subpart S measured by procedures in 63.457(d) of 40 CFR Part 63, Subpart S.
    (9 VAC 5-80-110, 9 VAC 5-60-100 and Condition VII.C.2.g of the 8/12/09 FESOP)

11. To demonstrate compliance with the 92% reduction of HAPs, the condensate (steam) stripper shall be equipped with a device to continuously measure and record the process wastewater feed rate; the steam feed rate; and the process wastewater column feed temperature. Monitoring shall be done using 3-hour rolling averages for the steam to feed ratio and process wastewater column feed temperature. The steam feed rate and process wastewater feed rate shall be used to determine the steam to feed ratio. Each monitoring device shall be installed, maintained and calibrated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the condensate (stream) stripper is operating.
(9 VAC 5-80-110, 9 VAC 5-50-20C, 9 VAC 5-50-260, 9 VAC 5-60-100 and Condition VII.C.2.b of the 8/12/09 FESOP)

12. To demonstrate compliance with the 65% collection of all HAPs (as MeOH) produced, the permittee shall monitor/calculate, on a daily basis, the HAP (as MeOH) mass from the digester system, turpentine system, and evaporator system and the HAP (as MeOH) mass of the collected streams which shall be sent to the condensate (steam) stripper for treatment. The daily monitoring shall be generated from flows, mass balance, and the annual HAP (as MeOH) testing. The daily HAP (as MeOH) mass shall be averaged over a 15-day period to determine a 15-day rolling average of the percent of HAP (as MeOH) collected. To demonstrate compliance with the alternate MACT compliance method requirement to collect at least 11.1 lbs of total HAP (as MeOH) per ODTP, the permittee shall determine on a daily basis the total HAP mass (as MeOH) collected from the digester system, the turpentine system, evaporator systems, and the LVHC and HVLC collection systems being sent to the condensate (steam) stripper for treatment. The daily determination shall be made using the daily average combined flow rate to the condensate (steam) stripper feed tank, and the representative average total HAP (as MeOH) concentration in this steam as determined using Condition 0. The daily HAP mass (as MeOH) collected shall be averaged over a 15-day period to determine a 15-day rolling average of the amount of HAP (as MeOH) collected.
(9 VAC 5-80-110 and Condition VII.C.2.a of the 8/12/09 FESOP)

13. Condensate (Steam) Stripper - An alarm shall be used to signal when the monitoring parameters (the process wastewater feed rate; the steam feed rate; and the process wastewater column feed temperature of the condensate (steam) stripper) drift out of the acceptable range triggering the need for prompt corrective action. The permittee shall keep a log summarizing each event (date and time of commencement and completion, parameter monitoring exceedances) and corrective action taken.
(9 VAC 5-80-110, 9 VAC 5-50-50H and Condition VII.C.2.c of the 8/12/09 FESOP)

14. The computer system used to continuously monitor each vent of the LVHC collection system shall be equipped with an alarm to alert the operator when a release has occurred.
(9 VAC 5-80-110, 9 VAC 5-50-50H and Condition VII.C.2.d of the 8/12/09 FESOP)

15. The RTO shall be equipped with a device to continually measure and record the temperature. There shall be an alarm system that sounds if the 3-hour rolling average RTO temperature falls below 871°C (1600°F), or in the alternate MACT compliance method, if the 3-hour rolling average falls below the minimum operating temperature required to maintain a total HAP concentration at the outlet of the RTO of 20 ppmv (as MeOH), corrected to 10 percent oxygen on a dry basis.
(9 VAC 5-60-100, 9 VAC 5-80-110 and Condition VII.C.2.h of the 8/12/09 FESOP)

16. The TRS scrubber shall be equipped with devices to continuously measure and record:

    a. The flow of make-up white liquor to the scrubber (3-hour rolling average),

    b. The pressure drop across the scrubber (3-hour rolling averaging),

    c. The pressure at the white liquor nozzle (3-hour rolling averaging), and;

    d. Any by-passing of the scrubber.

An alarm shall be connected to the bypass valve to alert if the scrubber is by-passed. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the scrubber is operating.
(9 VAC 5-80-110, 9 VAC 5-50-20C and Condition VII.C.2.i of the 8/12/09 FESOP)

17. TRS Scrubber - The permittee shall continuously monitor white liquor supply pressure, white liquor makeup flow rate, and gas pressure drop across the scrubber to demonstrate that a minimum TRS control efficiency of 67% is maintained. An alarm shall be used to signal if any of the following excursions occur, which would trigger the need for prompt corrective action.

    a. White liquor supply pressure less than 28 psig or greater than 36 psig

    b. White liquor makeup flow less than 10.0 gpm

    c. Gas pressure drop greater than 20 inches of water gauge

    The permittee shall keep a log summarizing each event (date and time of commencement and completion, parameter monitoring exceedances) and corrective action taken.
    (9 VAC 5-80-110, 9 VAC 5-50-50H and Condition VII.C.2.j of the 8/12/09 FESOP)

18. Control Efficiency - The TRS scrubber shall maintain a control efficiency for TRS of no less than 67% as demonstrated during stack testing and on a 12-month rolling average basis. The average annual control efficiency for the scrubber shall be calculated using the following equation:

$$ACE = CE\left[\frac{LVHCg - Sd}{LVHCg}\right]$$

    Where:

    ACE = Annual Control Efficiency
    CE = Stack Test Demonstrated Control Efficiency (most recent)
    LVHCg = time that LVHC gases are generated during 12-month period
    Sd = time that the Scrubber is down or malfunctioning during same period
    Malfunction = any time a parameter falls outside the acceptable range

    If the ACE is calculated to be below 67%, this could mean that there has been a PSD violation.
    (9 VAC 5-80-110 and Condition VII.C.2.k of the 8/12/09 FESOP)

CAM Conditions

19. The permittee shall monitor, operate, and maintain the electrostatic precipitators (ESPs) controlling the No. 4, 5 and 6 Recovery boilers (CRE01, 02 and 03) according to the following 3 tables. Any failure of the ESP equipment shall be recorded in an event log. For all equipment failures that cannot be repaired the same day, best efforts shall be made to repair the element no later than the next available unit outage appropriate to the repair task. The log shall also include a history of the actions taken to correct the problem and restore the equipment back to operation.

Emission Unit		**No. 4 Recovery Furnace** Emission Unit : CRE01 Emission Point: CRESV01A, CRESV01B Control Device: CRECD01		
Description		96,800 lb/hr black liquor solids		
Control Device		Electrostatic Precipitator		
Applicable Requirement		9 VAC 5-40-1680 , 40 CFR 63.862(a)(1)(i) and (ii)		
Regulated Pollutant		Particulate matter		
Emission Limit		3.00 lb/ADTP (1680 limit), Subpart MM limit		
I. CAM Indicator		**Visible Emissions (Opacity)**	**Electrostatic Precipitator Field Voltage**	**Electrostatic Precipitator Basic Care Inspection**
	Measurement Approach	Continuous opacity monitoring system	Continuous monitoring by Distributive Control System (DCS)	
	Monitoring Frequency	Continuous	Continuous	Weekly Inspection
	Justification	Visible emissions in excess of allowable levels are indicative of control device malfunction	Field fault alarms are an indication of control device malfunction	Any deviations noted from detailed checklist / diagnostic test are an indication of control device malfunction
II. Indicator Range		Opacity greater than 20% with an allowance of 35% for one 6-minute period per hour	Zero Voltage or Fault	
III. Performance Criteria				
Data Representativeness	**Detector Location**	Recovery furnace exhaust stacks downstream of the ESP	Individual Voltage field controllers	
	Sensor Specs (a) Range	0-100% Opacity	0 – 50K Volts	
	(b) Accuracy	± 1% opacity		
	Acquisition Procedure	electronic data file via data acquisition system – sampling and analysis at least for each successive 10-second period and one cycles of data recording for each successive 6-minute period	Field controllers continuously monitor field voltage readings. When the field controller detects a fault with a field, an alarm is initiated on the Operator's console through the Distributive Control System (DCS).	
	Data Recording System	PI data historian	Operator will record DCS alarm times, cause and corrective actions for any ESP faults in an event log.	
QA/QC Practices and Criteria		Per MACT QA/QC Plan	Once / Week Basic Care Route	Run diagnostics / inspect rappers, check instantaneous field voltages, check oxygen concentration, inspect blowers, check TR (transformer rectifier) operation
Data Collection Procedures		Visible emission measurements will be taken in at least every ten-second intervals; average value for each one-minute period is recorded. The one-minute values are averaged over a six-minute period to assess compliance with the indicator range	Continuous Scan	
Averaging period		6 minutes		

Emission Unit		**No. 5 Recovery Furnace** Emission Unit : CRE02 Emission Point: CRESV02A, CRESV02B Control Device: CRECD02		
Description		96,800 lb/hr black liquor solids		
Control Device		Electrostatic Precipitator		
Applicable Requirement		9 VAC 5-40-1680 , 40 CFR 63.862(a)(1)(i) and (ii)		
Regulated Pollutant		Particulate matter		
Emission Limit		3.00 lb/ADTP (1680 limit), Subpart MM limit		
I. CAM Indicator		**Visible Emissions (Opacity)**	**Electrostatic Precipitator Field Voltage**	**Electrostatic Precipitator Basic Care Inspection**
	Measurement Approach	Continuous opacity monitoring system	Continuous monitoring by Distributive Control System (DCS)	
	Monitoring Frequency	Continuous	Continuous	Weekly Inspection
	Justification	Visible emissions in excess of allowable levels are indicative of control device malfunction	Field fault alarms are an indication of control device malfunction	Any deviations noted from detailed checklist / diagnostic test are an indication of control device malfunction
II. Indicator Range		Opacity greater than 20% with an allowance of 35% for one 6-minute period per hour	Zero Voltage or Fault	
III. Performance Criteria				
Data Representativeness	**Detector Location**	Recovery furnace exhaust stacks downstream of the ESP	Individual Voltage field controllers	
	Sensor Specs (a) Range	0-100% Opacity	0 – 50K Volts	
	(b) Accuracy	± 1% opacity		
	Acquisition Procedure	electronic data file via data acquisition system – sampling and analysis at least for each successive 10-second period and one cycles of data recording for each successive 6-minute period	Field controllers continuously monitor field voltage readings. When the field controller detects a fault with a field, an alarm is initiated on the Operator's console through the Distributive Control System (DCS).	
	Data Recording System	PI data historian	Operator will record DCS alarm times, cause and corrective actions for any ESP faults in an event log.	
QA/QC Practices and Criteria		Per MACT QA/QC Plan	Once / Week Basic Care Route	Run diagnostics / inspect rappers, check instantaneous field voltages, check oxygen concentration, inspect blowers, check TR (transformer rectifier) operation
Data Collection Procedures		with the indicator range	Continuous Scan	
Averaging period		6 minutes		

Emission Unit		**No. 6 Recovery Furnace** Emission Unit : CRE03 Emission Point: CRESV03A, CRESV03B Control Device: CRECD03		
Description		209,000 lb/hr black liquor solids		
Control Device		Electrostatic Precipitator		
Applicable Requirement		9 VAC 5-40-1680 , 40 CFR 63.862(a)(1)(i) and (ii)		
Regulated Pollutant		Particulate matter		
Emission Limit		3.00 lb/ADTP (1680 limit), Subpart MM limit		
I. CAM Indicator		**Visible Emissions (Opacity)**	**Electrostatic Precipitator Field Voltage**	**Electrostatic Precipitator Basic Care Inspection**
	Measurement Approach	Continuous opacity monitoring system	Continuous monitoring by Distributive Control System (DCS)	
	Monitoring Frequency	Continuous	Continuous	Weekly Inspection
	Justification	Visible emissions in excess of allowable levels are indicative of control device malfunction	Field fault alarms are an indication of control device malfunction	Any deviations noted from detailed checklist / diagnostic test are an indication of control device malfunction
II. Indicator Range		Opacity greater than 20% with an allowance of 35% for one 6-minute period per hour	Zero Voltage or Fault	
III. Performance Criteria				
Data Representativeness	**Detector Location**	Recovery furnace exhaust stacks downstream of the ESP	Individual Voltage field controllers	
	Sensor Specs (a) Range	0-100% Opacity	0 – 50K Volts	
	(b) Accuracy	± 1% opacity		
	Acquisition Procedure	electronic data file via data acquisition system – sampling and analysis at least for each successive 10-second period and one cycles of data recording for each successive 6-minute period	Field controllers continuously monitor field voltage readings. When the field controller detects a fault with a field, an alarm is initiated on the Operator's console through the Distributive Control System (DCS).	
	Data Recording System	PI data historian	Operator will record DCS alarm times, cause and corrective actions for any ESP faults in an event log.	
QA/QC Practices and Criteria		Per MACT QA/QC Plan	Once / Week Basic Care Route	Run diagnostics / inspect rappers, check instantaneous field voltages, check oxygen concentration, inspect blowers, check TR (transformer rectifier) operation
Data Collection Procedures		Visible emission measurements will be taken in at least every ten-second intervals; average value for each one-minute period is recorded. The one-minute values are averaged over a six-minute period to assess compliance with the indicator range	Continuous Scan	
Averaging period		6 minutes		

(9 VAC 5-80-110 E and 40 CFR 64)

20. The permittee shall monitor, operate, and maintain the Scrubbers controlling the No. 4, 5 and 6 Smelt Dissolving Tanks (CRE04, 05 and 06) according to the following:

Emission Unit	**No. 4 Smelt Dissolving Tank**	**No. 5 Smelt Dissolving Tank**	**No. 6 Smelt Dissolving Tank**
Description	98,600 lb/hr black liquor solids smelt dissolving tank	98,600 lb/hr black liquor solids smelt dissolving tank	209,000 lb/hr black liquor solids smelt dissolving tank
Control Device	scrubber	scrubber	Two scrubbers (East & West)
Applicable Requirement	9 VAC 5-40-1680 and 40 CFR 63.862(a)(1)(i) and (ii)		
Regulated Pollutant	Particulate Matter		
Emission Limit	0.75 lb/ADTP Subpart MM limit	0.75 lb/ADTP Subpart MM limit	0.75 lb/ADTP Subpart MM limit
I. CAM Indicator	Exhaust fan amperage and scrubber liquid flow rate for each scrubber		
Measurement Approach	Continuous parameter monitoring system, as currently required by 40 CFR Part 63, Subpart MM		
Monitoring frequency	At least once every 15-minute period using procedures in 40 CFR 63.8(c). Four 15-minute averages comprise the one-hour averages and three one-hour averages comprise the three-hour rolling average		
Justification	Fan amperage (as approved per DEQ as an alternate method) and scrubbing liquid flow rate are the appropriate control device performance indicators to monitor in accordance with 40 CFR 63 Subpart MM requirements for chemical recovery system process units using a wet scrubber for particulate matter control.		

II. Indicator Range	Fan amperage 35% Full load amps (3-hr rolling average)	Scrubber liquid flow rate 60.0 gpm, minimum flow rate to scrubber (3-hr rolling average)	Fan amperage 35% Full load amps (3-hr rolling average)	Scrubber liquid flow rate 100.0 gpm, minimum flow rate to scrubber (3-hr rolling average)	Fan amperage 35% Full load amps (3-hr rolling average)	Scrubber liquid flow rate 40.0 gpm (East), 50.0 gpm (West), minimum flow rate to scrubber (3-hr rolling average)
	These indicator were established during the most recent performance test for Subpart MM					
III. Performance Criteria						
Data Representativeness: Detector Location	Located at scrubber motor	Liquid flow sensor in liquid recirculation line	Located at scrubber motor	Liquid flow sensor in liquid recirculation line	Located at each scrubber motor	Liquid flow sensor in liquid recirculation line
Data Representativeness: (a) Range	0 to 150 A	0 to 450 gpm	0 to 150 A	0 to 450 gpm	0 to 150 A	0 to 150 gpm
Data Representativeness: (b) Accuracy	±0.5%	±0.25% of reading	±0.5%	±0.25% of reading	±0.5%	±0.25% of reading
Data Representativeness: Acquisition Procedure	1-minute data and 15-minute data are combined to create 3-hour rolling average					
Data Representativeness: Data Recording system	PI historian					
QA/QC Practices and Criteria	Per Subpart MM QA/QC Plan					
Data Collection Procedures	Proficy data collection system and PI data historian					
Averaging Period	3-hour rolling					

(9 VAC 5-80-110 E and 40 CFR 64)

21. The permittee shall monitor, operate, calibrate and maintain the LVHC Collection System controlling the gases from the digesters, evaporators, condensate (steam) stripper, turpentine system and the chip bins according to the following:

Emission Unit		LVHC Collection System Vents Emission Units: UPM01, UPM02, UPM19, UPM20 Emission Points: PWRSV01 and PWRSV02 Control Devices: PWR02 and PWR03
Description		Digesters, evaporators, condensate (steam) stripper, turpentine system and chip bins
Control Device		No. 6 and No. 7 Power Boilers
Applicable Requirement		9 VAC 5-40-1690
Regulated Pollutant		TRS
Emission Limit		5 ppm @ 10% O_2
I. CAM Indicator		Routing process gases to power boilers for incineration, limiting process venting as required by 40 CFR Part 63 (MACT), Subpart S.
Measurement Approach		Vent monitoring systems
Monitoring Frequency		Continuous monitoring of LVHC Collection System emergency bypass vents
Justification		No direct monitoring of the boilers is required for TRS incineration per VADEQ 4/11/95 letter. This determination was made based on the revisions to 40 CFR Part 60 (NSPS) Subpart BB which deleted the requirement to monitor combustion temperature from the power boilers.
II. Indicator Range		Process venting to less than 1% as required by MACT Subpart S.
III. Performance Criteria		
Data	Detector Location	Located at each emergency bypass vent in the LVHC Collection System
	Sensor specs	The various vents have various methods of monitoring. (i.e., pressure vacuum breakers, temperature, rupture disks)
	Acquisition Procedure	Proficy data collection system
	Data Recording System	PI data historian
QA/QC Practices and Criteria		Per MACT QA/QC plan
Data Collection Procedures		Proficy data collection system
Averaging Period		Annual

(9 VAC 5-80-110 E and 40 CFR 64)

22. The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9.
(9 VAC 5-80-110 E and 40 CFR 64.6(c))

23. At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment, except as specified in the QA/QC Plan for equipment that is subject to an extended temporary shutdown.
(9 VAC 5-80-110E and 40 CFR 64.7(b))

24. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the Recovery Boilers (CRE01, 02 and 03), Smelt Dissolving Tanks (CRE04, 05 and 06) and/or the LVHC Collection System are operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions.
(9 VAC 5-80-110E and 40 CFR 64.7(c))

25. Upon detecting an excursion or exceedance, the permittee shall restore operation of the associated unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable.
(9 VAC 5-80-110E and 40 CFR 64.7(d)(1))

26. Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
(9 VAC 5-80-110E and 40 CFR 64.7(d)(2))

27. If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Department and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
(9 VAC 5-80-110E and 40 CFR 64.7(e))

28. If the accumulation of exceedances or excursions exceeds 5% duration of the operating time for each of the Recovery Boiler's opacity monitoring systems, the Smelt Dissolving Tank Scrubbers or the LVHC Collection System for a semiannual reporting period, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:

    a. Improved preventative maintenance practices;

    b. Process operation changes;

    c. Appropriate improvements to control methods;

    d. Other steps appropriate to correct control performance; and

    e. More frequent or improved monitoring.

    (9 VAC 5-80-110 E and 40 CFR 64.8(a) and (b))

C. Recordkeeping and Reporting

1. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Department. These records shall include, but are not limited to:

    a. Records of black liquor solids firing rates in tons/day for all recovery furnaces.

    b. Number of minutes each venting system vents from the LVHC collection system to the atmosphere and all TRS event minute records.

c. Stack test data for the Recovery Furnace Units.

d. Records of monitoring parameter ranges established for each Smelt Dissolving Tank Scrubber.

e. Records of Smelt Dissolving Tank Scrubber parameter monitoring data, including any period when the parameter levels were inconsistent with the parameter's established operating range, with a brief explanation of the cause of the deviation, the time the deviation occurred, the time corrective action was initiated and completed, and the corrective action taken.

f. Records and document of supporting calculations for compliance determinations with 40 CFR 63.865(a) through (e).

g. Annual feed rate of condensate to the condensate (steam) stripper.

h. Daily monitoring of the percent, or alternatively the amount, of HAP (as MeOH) collected and the 15 day rolling average.

i. Daily amount of ODTP processed. (This is only necessary when condensate collection compliance is based on the 11.1 lbs per ODTP requirement or when condensate treatment compliance is based on the 10.2 pounds per ODTP limit.)

j. Daily amount of HAPs (as MeOH) sent to the condensate (steam) stripper. (This is only necessary when compliance is based on the 10.2 pounds per ODTP limit.)

k. Daily amount of HAPs (as MeOH) removed by condensate (steam) stripper. (This is only necessary when compliance is based on the 10.2 pounds per ODTP limit.)

l. Monthly visual observation logs of the LVHC and HVLC closed vent collection systems including the information specified in 40 CFR 63.454(b).

m. RTO temperature data/records.

n. Annual monitoring of the condensate collection tank, condensate closed collection system, closed-vent systems.

o. Continuous monitoring system calibrations and equipment checks, percent operating time, and resultant excess emissions.

p. Average parametric monitoring data to prove control efficiency and the parametric drift logs of the TRS scrubber.

q. Annual control efficiency for the TRS scrubber, calculated monthly as the average of each consecutive 12-month period.

r. All fuel supplier certifications.

s. Operation and control device monitoring records for the LVHC collection system and the condensate (steam) stripper.

t. Scheduled and unscheduled maintenance and operator training of air pollution control equipment, monitoring devices, and process equipment which affect emissions.

u. Initial and continuing compliance testing.

v. TRS emissions corrected to 8% O_2 from the Recovery Furnace Units, calculated daily as the average of each 24-hour period.

w. Records of visual evaluations, visible emissions evaluations and any corrective action taken.

x. The permittee shall maintain records of any occurrence when corrective action is required under 40 CFR 63.864(k)(1)(ii), and when a violation is noted under 40 CFR63.864(k)(2)(i) or (iii).

These records shall be available at the facility for inspection by the Department and shall be current for the most recent 5 years.
(9 VAC 5-80-110 and 40 CFR 63.866 and Condition VII.C.4 of the 8/12/09 FESOP)

2. The permittee shall furnish written reports to the Department of excess TRS emissions from any process (CRE01, 02 and 03) monitored by a continuous monitoring system (CEMS) on a quarterly basis, postmarked no later than the 30th day following the end of the calendar quarter. These reports shall include, but are not limited to the following information:

   a. The magnitude of excess emissions, any conversion factors used in the calculation of excess emissions, and the date and time of commencement and completion of each period of excess emissions;

   b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the process, the nature and cause of the malfunction (if known), the corrective action taken or preventative measures adopted;

   c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and

   d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in that report.

   (9 VAC 5-40-50C and 9 VAC 5-80-110)

3. Quarterly Reports

   a. The permittee shall furnish written quarterly reports to the Department of the following:

      i Any instances of corrective action required to be implemented (in accordance with 40 CFR 63.864(k)(1)(i) and (ii) of Subpart MM) for any Smelt Dissolving Tank monitored parameter or

      ii Any recovery furnace COMS exceedance.

   b. This report shall contain the information specified in 40 CFR 63.10(c) of as well as the number and duration of occurrences when the source met or exceeded the conditions in 40 CFR 63.864(k)(1), and the number and duration of occurrences when the source met or exceeded the conditions in 40 CFR 63.864(k)(2). Reporting excess emissions below the violation thresholds of 40 CFR 63.864(k) does not constitute a violation of the applicable standard.

   c. When no exceedances of parameters have occurred, the owner or operator shall submit a semiannual report stating that no excess emissions occurred during the reporting period.

   d. Quarterly and semiannual reports are to be postmarked no later than the 30th day following the end of the calendar quarter and semiannual period, respectively.

   (9 VAC 5-80-110 and 40 CFR 63.867(c))

4. The permittee shall submit excess emissions and continuous monitoring system reports (for the condensate collection system and the LVHC and HVLC closed-vent collection systems) as described in Condition V.C.2. (9 VAC 5-80-110 and 9 VAC 5-50-50)

5. The permittee shall comply with the additional reporting requirements for HAP Metals standards as specified in 40 CFR 63.867(b) within 180 days of the event that triggers this notification.
(9 VAC 5-80-110 and 40 CFR 63.867(b))

D. Testing

1. The permittee shall perform a stack test once each permit term on each Recovery Boiler Unit (CRE-01, 02, and 03) to prove compliance with the particulate emission standard.
(9 VAC 5-80-110)

2. A stack test to prove compliance with condition VII.B.18 shall be performed on the TRS scrubber for the LVHC non-condensable gases once per permit term. The details of the tests shall be arranged with the Department. These stack test results shall be submitted to the Department within 60 days after test completion and shall conform to the test report format enclosed with this permit.
(9 VAC 5-80-110, 9 VAC 5-50-30 G and Condition VII.C.3 of the 8/12/09 FESOP)

VIII. Bleach Plant Process Area

The emission units associated with this section of the permit are the following:

Unit ID	Emission Unit Description	Unit ID	Emission Unit Description
BLP01	**D Bleach Line**	BLP05	**F Bleach O_2 Delignification**
	Washer Hoods		Pre-O_2 Blend Chest
	D1 Tower		O_2 Reactor
	D2 Tower		Pre-O_2 Pressate Tank
	DD1 Seal Tank		O_2-1 Pressate Tank
	DD2 Seal Tank		O_2-2 Pressate Tank
	E1 & E2 Seal Tanks		O_2 Blow Tank
	DO Seal Box		Pre O_2 O_2-1 and O_2-2 Presses
BLP02	**E Bleach Line**		O_2 Interstage Chest
	Washer Hoods	BLP06	**High Density Storage Chests**
	D Tower		#1 Hi density chest
	D Seal Tank		#2 Hi density chest
	DO Seal Tank		#3 Hi density chest
	E Seal Tank		#4 Hi density chest
	E Tower		#40 Hi density chest
	DO Tower	BLP07	**High Density Chests**
	DO Blend Chest		#38 Hi-density chest
BLP03	**F Bleach Line**		#39 Hi-density chest
	Washer Hoods		#41 Hi-density chest
	Post O2 Surge Tank		#43 Hi-density chest
	D Tower		#38 Hi-density chest
	D Seal Tank		#44 Hi-density chest
	E Seal Tank	BLP08	**SVP Plant**
	DO Tower		Scrubber Vent Pipe
	DO Seal Tank		ClO_2 Generator Explosion Hatch Vent Pipe
	Oxygen Gas Cooler	BLP09	**R3 Plant**
BLP04	**E Bleach O_2 Delignification**		Scrubber Vent Pipe
	O_2 Blend Chest		ClO_2 Generator Explosion Hatch Vent Pipe
	O_2-1 Washer and Filtrate Tank		3 Chlorine Dioxide Storage Tanks
	O_2-2 Washer and Filtrate Tank	BLP12	**Regenerative Thermal Oxidizer (RTO)**
	Twin Roll Presses	BLP14	**HVLC Collection System - Condesate Drains**
	Hold Tank		E-Line / D-Wash Condensate Tank
	O_2 Pressate Tank		RTO Combined Condensate Tank
	O_2 Blend Chest	BLP15	**Methanol Tank**
	O_2 Blow Tank		

A. Limitations

1. Chlorinated HAP emissions from each stage of each bleach line (BLP01, 02 and 03) where chlorinated compounds are introduced shall be controlled by a collection and scrubber system. Each collection and scrubber system shall be provided with adequate access for inspection and shall be in operation when its corresponding bleach line is operating.
   (9 VAC 5-80-110 and Condition VII.D.1.a of the 8/12/09 FESOP)

2. The bleach plant collection system for each bleach line (BLP01, 02 and 03) shall be a closed vent system routed to a scrubber. All emissions from the scrubbers shall meet an outlet concentration of 10 ppm or less by volume of total chlorinated HAP (40 CFR 63.445(c)(2)).
   (9 VAC 5-80-110, 40 CFR 63.445(c)(2), 40 CFR 63.450 and Condition VII.D.1.b of the 8/12/09 FESOP)

3. Each bleach plant collection and scrubber system shall be operated in compliance with the requirements of 40 CFR 63.450 and 40 CFR 63.453.
(9 VAC 5-80-110, 40 CFR 63.450, 40 CFR 63.453 and Condition VII.D.1.c of the 8/12/09 FESOP)

4. To comply with 40 CFR 63.443(a)(1) the facility shall control the HAP emissions from the following equipment systems:

   a. E-Bleach Line O_2–1 Washers and Filtrate Tank.

   b. E-Bleach Line O_2–2 Washers and Filtrate Tank.

   c. E-Bleach Line East and West Twin Roll Press.

   d. E-Bleach Line O_2 System Blow Tank, Blend Chest, and Pressate Level Tank.

   The collection of HVLC system gases shall include the gases from the units listed in a-d above.
   (9 VAC 5-60-100 and 9 VAC 5-80-110 and Condition VII.D.1.d of the 8/12/09 FESOP)

5. The HVLC gases from the E-Bleach Line O_2–1 Washers and Filtrate Tank, the E-Bleach Line O_2–2 Washers and Filtrate Tank, the E-Bleach Line East and West Twin Roll Press, and the E-Bleach Line O_2 System Blow Tank, Blend Chest, and Pressate Level Tank Vents shall be collected by a closed vent system and routed to the RTO for destruction.
(9 VAC 5-60-100, 9 VAC 5-80-110 and Condition VII.D.1.e of the 8/12/09 FESOP)

6. The RTO used to reduce total HAP emissions shall be designed and operated at a minimum temperature of 871°C (1600°F) (3-hour rolling average) and a minimum residence time of 0.75 seconds. As an alternate MACT compliance method, the RTO shall be operated at or above the minimum temperature necessary to maintain the total HAP concentration at the outlet of the RTO at 20 parts per million or less by volume (as MeOH), corrected to 10 percent oxygen on a dry basis (3-hour rolling average). The permittee shall establish the minimum necessary RTO operating temperature based on stack test results, good engineering judgment and experience.
(9 VAC 5-60-100, 9 VAC 5-80-110 and Condition VII.D.1.f of the 8/12/09 FESOP)

7. The process condensates shall be collected from each HVLC collection system listed in condition A.4 above.
(9 VAC 5-60-100, 9 VAC 5-80-110 and Condition VII.D.1.g of the 8/12/09 FESOP)

8. The HVLC collection system condensates shall be conveyed in a closed collection system which meets the individual drain system requirements specified in 63.960, 63.961, and 63.962 of 40 CFR Part 63, Subpart RR except for closed vent systems and control devices shall be designed and operated in accordance with 40 CFR 63.443(d) and 63.450, instead of in accordance with 63. 693 of 40 CFR Part 63, Subpart DD as specified in 40 CFR 63.962(a)(3)(ii), (b)(3)(ii)(A), and (b)(5)(iii).
(9 VAC 5-60-100, 9 VAC 5-80-110 and Condition VII.D.1.h of the 8/12/09 FESOP)

9. The condensate collection tank shall have a fixed roof and all openings shall be designed and operated with no detectable leaks as indicated by an instrument reading of <500 ppm VOC (Method 21) above background and vented into a closed-vent system meeting the requirements of 40 CFR 63.450 and routed to a control device that meets the requirements of 40 CFR 63.443(d). Each opening shall be maintained in a closed, sealed position at all times that the tank contains pulping condensates or HAPs except when it is necessary to use the opening for sampling, removal, or for equipment inspection, maintenance, or repair.
(9 VAC 5-60-100, 9 VAC 5-80-110 and Condition VII.D.1.i of the 8/12/09 FESOP)

10. The process condensates shall be treated by the condensate (steam) stripper. The treatment of the condensates by the condensate (steam) stripper shall reduce the total HAPs by either ≥92% by weight or remove 10.2 pounds per ODTP. Each HAP removed from the process condensate streams during treatment and handling by condensate (steam) stripper shall be enclosed and vented into a closed vent system (the LVHC collection system) and routed to power boilers No. 6 or No. 7 for destruction. The enclosures and closed vent systems shall meet the requirements of 63.443(d)(4) and 63.450 of 40 CFR Part 63, Subpart S.
(9 VAC 5-80-110 and Condition VII.D.1.j of the 8/12/09 FESOP)

11. Negative Pressure Enclosures – Each enclosure shall maintain negative pressure at each enclosure or hood opening. Each enclosure or hood opening closed during the initial performance test specified in 40 CFR 63.457(a) shall be maintained in the same closed and sealed position as during the performance test at all times except when necessary to use the opening for sampling, inspection, maintenance or repairs.
(9 VAC 5-60-100, 9 VAC 5-80-110 and Condition VII.D.1.k of the 8/12/09 FESOP)

12. Positive Pressure Components - Each component of the closed-vent system used to comply with 40 CFR 63.443(c), 63.444(b), and 63.445(b) that is operated at a positive pressure and located prior to a control device shall be designed for and operated with no detectable leaks as indicated by an instrument reading of less than 500ppmv above background as measured by the procedures specified in 40 CFR 63.457(d).
(9 VAC 5-60-100, 9 VAC 5-80-110 and Condition VII.D.1.l of the 8/12/09 FESOP)

13. Except where this permit is more restrictive than the applicable requirement the facility shall be operated in compliance with the requirements of 40 CFR Part 63, Subpart S or as described in IV.D.3.c (See Parity Equipment listed in Appendix A).
(9 VAC 5-80-110, 40 CFR 63.440(d) and Condition VII.D.1.m of the 8/12/09 FESOP)

14. Excess Emissions - Periods of excess emissions reported under 40 CFR 63.455 shall not be a violation of 40 CFR 63.443(c) and (d) provided that the time of excess emissions (excluding periods of startup, shutdown, or malfunction) divided by the total process operating time in a semi-annual reporting period does not exceed the following levels: (40 CFR 63.443(e))

    a. One percent for control devices used to reduce the total HAP emissions from the LVHC system; and

    b. Four percent for control devices used to reduce the total HAP emissions from the HVLC system; and

    c. Four percent for control devices used to reduce the total HAP emissions from both the LVHC and HVLC systems.

    (9 VAC 5-80-110 and Condition VII.D.1.n of the 8/12/09 FESOP)

15. **Requirements by Reference** - Except where this permit is more restrictive than the applicable requirement, the Methanol Tank shall be operated in compliance with the requirements of 40 CFR 60, Subpart Kb. The Methanol tank is subject to 40 CFR 60, Subpart Kb (60.116b(a) and (b) only).
(9 VAC 5-80-110, 9 VAC 5-50-400, 9 VAC 5-50-410 and Condition VII.D.1.o of the 8/12/09 FESOP)

B. Monitoring

1. Each bleach plant collection and scrubber system shall be equipped with a device to continuously measure and record: the pH of the gas scrubber effluent; the gas scrubber liquid influent flow rate; and the operation of the fan motor for the vent gas flow (low speed alarm). Monitoring shall be done using 3-hour rolling averages for the pH and the liquid flow rate. Monitoring shall be done continuously on the fan operation. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the bleach lines and scrubbers are operating.
(9 VAC 5-80-110 and 40 CFR 63.446(c)(2) and Condition VII.D.2.a of the 8/12/09 FESOP)

2. Gas Scrubbers - An alarm shall be used to signal when the monitoring parameters (the pH of the gas scrubber effluent, the gas scrubber liquid influent flow rate, and the operation of the fan motor for the vent gas flow (low speed alarm) drift out of the acceptable range triggering the need for prompt corrective action. The permittee shall keep a log summarizing each event (date and time of commencement and completion, parameter monitoring exceedances) and corrective action taken.
(9 VAC 5-80-110 and Condition VII.D.2.b of the 8/12/09 FESOP)

3. If repair or replacement of the fan blades or fan motors for the vent gas to the scrubbers is required, the permittee shall furnish written notification to the Department within 14 days of the occurrence. After the repair or replacement, a new stack test shall be performed to demonstrate compliance with Condition VIII.A.2, or the permittee shall demonstrate by some other means that the gas flow rate has not increased to the scrubber as a result of the changes. The notification shall describe the nature of the work done and how permittee plans to demonstrate compliance with Condition VIII.A.2.
(9 VAC 5-80-110 and Condition VII.D.2.c of the 8/12/09 FESOP)

4. Each enclosure and closed vent system used to comply with Subpart S shall have a visual inspection conducted once during each calendar month, with at least 21 days elapsed time between inspections, to ensure each opening is maintained in the closed position and sealed. The permittee shall prepare and maintain a site-specific inspection plan including a drawing or schematic of the components of applicable affected equipment. The inspection shall include the ductwork, piping, enclosures, and connections to covers for visible evidence of defects. An inspection log shall be kept containing the information specified in 40 CFR 63.454(b).
(9 VAC 5-80-110, 9 VAC 5-60-100 and Condition VII.D.2.d of the 8/12/09 FESOP)

5. Each enclosure and closed-vent system shall demonstrate initially and annually that each enclosure opening is maintained at negative pressure as specified in 63.457(e) of 40 CFR Part 63, Subpart S.
(9 VAC 5-80-110, 9 VAC 5-60-100 and Condition VII.D.2.e of the 8/12/09 FESOP)

6. Each positive pressure closed-vent system shall demonstrate initially and annually no detectable leaks as specified in 63.450(c) of 40 CFR Part 63, Subpart S measured by procedures in 63.457(d) of 40 CFR Part 63, Subpart S.
(9 VAC 5-80-110, 9 VAC 5-60-100 and Condition VII.D.2.f of the 8/12/09 FESOP)

7. The RTO shall be equipped with a device to continually measure and record the temperature. There shall be an alarm system that sounds if the 3-hour rolling average RTO temperature falls below 871°C (1600°F), or for the alternate MACT compliance method, if the 3-hour rolling average falls below the minimum operating temperature required to maintain a total HAP concentration at the outlet of the RTO of 20 ppmv (as MeOH), corrected to 10 percent oxygen on a dry basis.
(9 VAC 5-60-100, 9 VAC 5-80-110 and Condition VII.D.2.g of the 8/12/09 FESOP)

C. Recordkeeping and Reporting

1. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Department. These records shall include, but are not limited to:

   a. Monthly visual observation logs of the bleach plant and HVLC closed vent collection systems including the information specified in 40 CFR 63.454(b);

   b. RTO temperature data/records;

   c. Continuous monitoring system calibrations and calibration checks, percent operating time, and excess emissions;

   d. Operation and control device monitoring records for the bleach plant scrubbers;

   e. Scheduled and unscheduled maintenance and operator training of air pollution control equipment, monitoring devices, and process equipment that affects emissions;

f. Initial and continuing compliance testing; and

g. Dimensions of the Methanol Tank and an analysis showing the capacity of the Tank. These records shall be kept for the life of the storage vessel.

These records shall be available at the facility for inspection by the Department and shall be current for the most recent 5 years.
(9 VAC 5-80-110 and Condition VII.D.3 of the 8/12/09 FESOP)

2. The permittee shall submit excess emissions and continuous monitoring system (for the bleach plant scrubber parameters and the HVLC closed-vent collection system) reports as described in Condition V.C.2.
(9 VAC 5-80-110 and 9 VAC 5-50-50)

3. The permittee shall furnish written notification to the Department of any changes to the source of shower water for the F-Bleach Line O_2 System. The current sources of shower water are hot fresh water or stripped (clean) condensate. In addition, the permittee shall notify the Department when any changes occur at the facility (e.g., operational or process changes, operating scenario changes, etc.) that could potentially increase the amount of HAP in the process waters for the deckers above the 400 ppm HAP (as MeOH) threshold.
(9 VAC 5-80-110)

IX. Paper Mill Process Area

The emission units associated with this section of the permit are the following:

Unit ID	Emission Unit Description	Unit ID	Emission Unit Description
PRM01	**No. 1 Paper Machine**	PRM05	**No. 5 Paper Machine**
	Secondary Screen Feed Tank (2)	PRM06	**No. 6 Paper Machine**
	Vents (3)		No. 6 PM Vacuum Pump Exhaust (2)
	Ceiling Vents (9)	PRM07	**FRP Chest**
	Air Knife Coater Vent	PRM09	**No. 1 Wet End Starch silo**
	Coater Section Hoods (4)	PRM10	**No. 2 Wet End Starch silo**
PRM03	**No. 3 Paper Machine**	PRM11	**Bleached Stock LD Storage**
	No. 3 PM Vacuum Pump Exhaust	PRM13	**No. 1 Dry End Starch Silo**
PRM04	**No. 4 Paper Machine**	PRM14	**No. 2 Dry End Starch Silo**
	Fourdrinier vents (2)	PRM15	**No. 3 Dry End Starch Silo**

A. Limitations

1. Starch emissions from the two storage silos (PRM09 and 10) shall be controlled by fabric filters. The fabric filters shall be provided with adequate access for inspection.
   (9 VAC 5-80-110 and Condition VII.E.1.a of the 8/12/09 FESOP)
2. Starch emissions from the railcar unloading system shall be controlled by a closed system. The closed system shall be provided with adequate access for inspection.
   (9 VAC 5-80-110 and Condition VII.E.1.b of the 8/12/09 FESOP)
3. No visible emissions shall be detected from the starch silo fabric filters (PRM09 and 10).
   (9 VAC 5-80-110 and Condition VII.E.1.c of the 8/12/09 FESOP)

B. Monitoring

Each time the silos are loaded, unless loading takes place at night, the permittee shall perform visual evaluations of each stack (PRM09 and 10). The stacks shall be observed by the permittee for a period of not less than one minute for the presence of visible emissions. If visible emissions are observed, the permittee shall perform corrective actions to eliminate the cause of the visible emissions.
(9 VAC 5-80-110 and Condition VII.E.2 of the 8/12/09 FESOP)

C. Recordkeeping

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Department. These records shall include, but are not limited to maintaining a log of the date, time, location, name of person performing the visible emissions observations, whether or not visible emissions were detected, and any corrective actions taken, if necessary. These records shall be available for inspection by the DEQ and shall be current for the most recent five years.
(9 VAC 5-80-110E and Condition VII.E.3 of the 8/12/09 FESOP)

X. Power House Process Area

The emission units associated with this section of the permit are the following:

Unit ID	Emission Unit Description	Unit ID	Emission Unit Description
PWR01	No. 5 Power Boiler	PWR05	No. 9 Power Boiler
PWR02	No. 6 Power Boiler	PWR12	LVHC venting at Nos. 6 and 7 Power Boilers
PWR03	No. 7 Power Boiler		

A. Limitations

1. Particulate matter emissions from the No. 9 Power boiler or combustion turbine (PWR05) and duct burner shall be minimized by use of natural gas.
(9 VAC 5-80-110 and Condition VII.F.1.e of the 8/12/09 FESOP)

2. Sulfur dioxide emissions from the turbine (PWR05) and duct burner shall be controlled by use of low sulfur fuel – natural gas.
(9 VAC 5-80-110 and Condition VII.F.1.f of the 8/12/09 FESOP)

3. Nitrogen oxide (NO_x) emissions from the turbine (PWR05) shall be controlled by low- NO_x natural gas combustors.
(9 VAC 5-80-110 and Condition VII.F.1.g of the 8/12/09 FESOP)

4. Nitrogen oxide emissions from the duct burner (PWR05) shall be controlled by low- NO_x burners.
(9 VAC 5-80-110 and Condition VII.F.1.h of the 8/12/09 FESOP)

5. Nitrogen oxide emissions from the turbine (PWR05) and duct burner shall be controlled by selective catalytic reduction (SCR).
(9 VAC 5-80-110 and Condition VII.F.1.k of the 8/12/09 FESOP)

6. Carbon monoxide and volatile organic compound emissions from the turbine (PWR05) and duct burner shall be controlled by oxidation catalyst and good combustion practices.
(9 VAC 5-80-110 and Condition VII.F.1.i of the 8/12/09 FESOP)

7. Formaldehyde emissions from the turbine (PWR05) shall be controlled by good combustion practices.
(9 VAC 5-80-110 and Condition VII.F.1.j of the 8/12/09 FESOP)

8. Ammonia slip from the SCR (PWR05) shall be controlled by good process control instrumentation and proper ammonia distributor grid configuration.
(9 VAC 5-80-110 and Condition VII.F.1.l of the 8/12/09 FESOP)

9. Except as specified in this permit, the turbine (PWR05) shall be operated in compliance with the emissions requirements of 40 CFR 60, Subpart GG.
(9 VAC 5-80-110 and Condition VII.F.1.p of the 8/12/09 FESOP)

10. Emissions from the operation of the combustion turbine (No. 9 power boiler) shall not exceed the limits specified below:

Nitrogen Oxides (as NO_2)	0.2 lbs/MMBtu	1-hour averaging period
	0.035 lbs/MMBtu	30-day averaging period
Carbon Monoxide	0.06 lbs/MMBtu	30-day averaging period

Compliance with these limits shall be determined by CEMS data. Except as specified in this permit, the duct burner for the turbine (PWR05) shall be operated in compliance with 40 CFR Part 60, Subpart Db.
(9 VAC 5-80-110, 40 CFR 60.40b, 40 CFR 60.46b(f)(2) and Condition VII.F.1.q of the 8/12/09 FESOP)

11. The SCR unit shall operate at all times that the turbine (PWR05) is operating, except during startup, shutdown, and malfunctions. During turbine startup, the permittee shall begin use of SCR (commence ammonia injection) within 2 hours of the initial turbine firing, or when the temperature of the catalyst bed reaches a suitable predetermined temperature level, whichever occurs first. During turbine shutdown, the permittee shall discontinue use of the SCR (discontinue ammonia injection) when the temperature of the catalyst bed drops below a predetermined temperature level, but not more than 2 hours prior to the time at which the fuel feed to the turbine is discontinued. The permittee shall operate the facility in a manner so as to optimize the effectiveness of the SCR units while minimizing ammonia slip.
(9 VAC 5-80-110 and Condition VII.F.1.m of the 8/12/09 FESOP)

12. Nitrogen Dioxide emissions from the No. 6 power boiler (PWR02) shall be controlled by combustion techniques to include using an over fire air system.
(9 VAC 5-80-110 and Condition VII.F.1.a of the 8/12/09 FESOP)

13. Carbon Monoxide emissions from the No. 6 power boiler (PWR02) shall be controlled by good combustion practices.
(9 VAC 5-80-110 and Condition VII.F.1.b of the 8/12/09 FESOP)

14. Sulfur Dioxide emissions from the No. 6 power boiler (PWR02) shall be controlled by the use of wood and low sulfur coal.
(9 VAC 5-80-110 and Condition VII.F.1.c of the 8/12/09 FESOP)

15. Particulate emissions from the No. 5, No. 6 and No. 7 power boilers (PWR01, 02 and 03) shall be controlled by the use of electrostatic precipitators. The ESPs shall be provided with adequate access for inspection and shall be in operation when the respective boiler is operating.
(9 VAC 5-80-110 and Condition VII.F.1.d of the 8/12/09 FESOP)

16. Visible emissions from the No. 6 power boiler (PWR02) shall not exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.
(9 VAC 5-80-110 and Condition VII.F.1.n of the 8/12/09 FESOP)

17. Emissions from the operation of the fuel burning equipment installation No. 5, No. 6 and No. 7 power boilers (PWR01, 02 and 03, combined) shall not exceed the limits specified below:

Particulate Matter	0.1722 lbs/mmBtu

The emission ratio in lbs/million Btu input shall be determined by the following equation: $E = 1.0906H^{-0.2594}$, where H is the total rated capacity in millions of Btu/hr.
(9 VAC 5-40-900A and 9 VAC 5-80-110)

18. Emissions from the operation of the No. 5 power boiler (PWR01) shall not exceed the following limit:

Particulate Matter	60.0 lb/hr

The emission rates shall be proposed by the owner and may not be changed without consent of the board.
(9 VAC 5-40-910D and 9 VAC 5-80-110)

19. Emissions from the operation of the No. 6 power boiler (PWR02) shall not exceed the following limit:

Particulate Matter	70.0 lb/hr

The emission rates shall be proposed by the owner and may not be changed without consent of the board.
(9 VAC 5-40-910D and 9 VAC 5-80-110)

20. Emissions from the operation of the No. 7 power boiler (PWR03) shall not exceed the following limit:

Particulate Matter	81.5 lb/hr

The emission rates shall be proposed by the owner and may not be changed without consent of the board.
(9 VAC 5-40-910D and 9 VAC 5-80-110)

21. Emissions from the operation of the fuel burning equipment installation (PWR01, 02 and 03, combined) shall not exceed the following limit:

Sulfur Dioxide	3,031 lbs/hr

The emission rate in lbs/hr shall be determined by the following equation: S = 2.64K, where S = allowable emission of sulfur dioxide expressed in pounds per hour, and K = heat input at total rated capacity expressed in million Btu per hour.
(9 VAC 5-40-930A and 9 VAC 5-80-110)

22. Visible emissions from each of the No. 5 and No. 7 power boilers (PWR01 and 03) shall not exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60% opacity.
(9 VAC 5-40-940, 9 VAC 5-80-110 and Condition VII.F.1.o of the 8/12/09 FESOP)

B. Monitoring

1. Continuous emissions monitoring data from No. 9 power boiler (PWR05) of nitrogen oxide shall directly determine compliance with emission limits on an hourly basis and a 30-day rolling average basis. (Emissions generated during the 2-hr startup or shutdown periods described in Condition A.11 of this section are excluded.) Minimum data capture, quality assurance, and reporting requirements of NSPS 40 CFR 60.13, 60.48b(f), and 60.49b shall apply.
(9 VAC 5-80-110, 40 CFR 60.13, 60.48, 60.49 and Condition VII.F.2.d of the 8/12/09 FESOP)

2. Continuous emissions monitoring data from No. 9 power boiler (PWR05) for carbon monoxide (CO) shall be used as an indicator of compliance with the emission limit in Condition A.10. Minimum quality assurance of NSPS 40 CFR 60.13 shall apply. The same reporting requirements as specified for nitrogen oxides under NSPS 40 CFR 60.49b shall apply.
(9 VAC 5-80-110 and Condition VII.F.2.e of the 8/12/09 FESOP)

3. A continuous opacity monitoring system (COMS) may be used on No. 6 power boiler (PWR02) to satisfy the visible emission evaluation requirement in lieu of 40 CFR, Part 60, Appendix A, Method 9. The reported test data shall include averages of all six-minute continuous periods within the test period. It is the responsibility of the permittee to demonstrate that the COMS has met the requirements of the applicable performance evaluation, that the COMS has been properly maintained and operated, and that the resulting data has not been altered in any way. If COMS data indicates compliance for a period during which Method 9 data indicates non-compliance, the Method 9 data shall be used to determine compliance with the visible emission limit.
(9 VAC 5-80-110 and Condition VII.F.2.a of the 8/12/09 FESOP)

4. CEMS used to quantify emissions for cap compliance purposes per Condition IV.F. and meeting the design specifications of 40 CFR Part 60, Appendix B, shall be installed to measure and record the stack flow rate and the emissions of NO_x, SO_2 and CO from the No. 5, No. 6 and No. 7 power boilers as ppmv. The CEMS shall be installed, calibrated, maintained, audited and operated in accordance with the Department's approved procedures. The flue gas flow monitors shall be installed, calibrated and audited using Appendix A of Part 75 as a guide. A Quality Assurance/Quality Control Plan shall be developed for the CEMS using the requirements of 40 CFR 60.13 and Appendices B and F as a guide. The CEMS shall be audited in conformance with schedules defined by the approved QA/QC Plan (see Condition IV.G.3). Data shall be reduced to one-hour averages. The SPAN VALUE for each pollutant monitor shall be a value that is approved by the Department and if required by the Department a dual span monitor may be required for SO_2 on No. 6 & No. 7 power boilers. Records shall be kept for five years and shall be available for inspection.
(9 VAC 5-80-110 and Condition VII.F.2.b of the 8/12/09 FESOP)

5. On No. 6 power boiler (PWR02) a CEMS, meeting the design specifications of 40 CFR Part 75 Subpart H shall be installed to measure and record the emissions of NO_x from the stack as lb/hr corrected to 7% O_2 or 12% CO_2. The CEMS shall be installed, calibrated, maintained, audited and operated in accordance with the requirements of 40 CFR Part 75 Subpart H.
(9 VAC 5-80-110)

6. A continuous opacity monitoring system shall be used on power boilers No. 5, No. 6, and No. 7 (PWR01, 02, and 03) to satisfy the visible emission evaluation requirement in lieu of 40 CFR, Part 60, Appendix A, Method 9. If monitoring system data indicates compliance for a period during which Method 9 data indicates non-compliance, the Method 9 data shall be used to determine compliance with the visible emission limit.
(9 VAC 5-50-20, 9 VAC 5-80-110 and Condition VII.F.2.c of the 8/12/09 FESOP)

CAM Conditions

7. The permittee shall monitor, operate, and maintain the multicyclones and electrostatic precipitators (ESPs) controlling the No. 5, No. 6, and No. 7 power boilers (PWR01, 02, and 03) according to the following 3 tables.

Emission Unit		**No. 5 Power Boiler** Emission Unit : PWR01 Emission Point: PWRSV03 Control Device: PWRCD03/06		
Description		193 MMBtu/hr boiler		
Control Device		Multiclones and ESP		
Applicable Requirement		9 VAC 5-40-900A, 9 VAC 5-40-910D		
Regulated Pollutant		Particulate matter		
Emission Limit		0.172 lb/MMBtu, 60 lb/hr		
I. CAM Indicator		**Visible Emissions (Opacity)**	**Electrostatic Precipitator Field Voltage**	**Electrostatic Precipitator Basic Care Inspection**
	Measurement Approach	Continuous opacity monitoring system	Continuous monitoring by Distributive Control System (DCS)	
	Monitoring Frequency	Continuous	Continuous	Weekly Inspection
	Justification	Visible emissions in excess of allowable levels are indicative of control device malfunction	Field fault alarms are an indication of control device malfunction	Any deviations noted from detailed checklist / diagnostic test are an indication of control device malfunction
II. Indicator Range		Opacity greater than 20% with an allowance of 60% for one 6-minute period per hour	Zero Voltage or Fault	
III. Performance Criteria				
Data Representativeness	**Detector Location**	Boiler exhaust stack downstream of the ESP	Individual Voltage field controllers	
	Sensor Specs (a) Range	0-100% Opacity	0 – 50K Volts	
	(b) Accuracy	± 1% opacity		
	Acquisition Procedure	Electronic data file via data acquisition system – sampling and analysis at least for each successive 10-second period and one cycles of data recording for each successive 6-minute period	Field controllers continuously monitor field voltage readings. When the field controller detects a fault with a field, an alarm is initiated on the Operator's console through the Distributive Control System (DCS).	
	Data Recording System	PI data historian	Operator will record DCS alarm times, cause and corrective actions for any ESP faults in an event log.	
QA/QC Practices and Criteria		Per Site QA/QC Plan	Once / Week Basic Care Route	Run diagnostics / inspect rappers, check instantaneous field voltages, check oxygen concentration, inspect blowers, check TR (transformer rectifier) operation
Data Collection Procedures		Visible emission measurements will be taken in at least every ten-second intervals; average value for each one-minute period is recorded. The one-minute values are averaged over a six-minute period to assess compliance with the indicator range	Continuous Scan for Failure - Alarm	
Averaging period		6 minutes		
Emission Unit		**No. 6 Power Boiler** Emission Unit : PWR02 Emission Point: PWRSV01 Control Device: PWRCD01/07		

Description	496 MMBtu/hr boiler		
Control Device	Multiclones and ESP		
Applicable Requirement	9 VAC 5-40-900A, 9 VAC 5-40-910D		
Regulated Pollutant	Particulate matter		
Emission Limit	0.172 lb/MMBtu, 70 lb/hr		
I. CAM Indicator	**Visible Emissions (Opacity)**	**Electrostatic Precipitator Field Voltage**	**Electrostatic Precipitator Basic Care Inspection**
Measurement Approach	Continuous opacity monitoring system	Continuous monitoring by Distributive Control System (DCS)	
Monitoring Frequency	Continuous	Continuous	Weekly Inspection
Justification	Visible emissions in excess of allowable levels are indicative of control device malfunction	Field fault alarms are an indication of control device malfunction	Any deviations noted from detailed checklist / diagnostic test are an indication of control device malfunction
II. Indicator Range	Opacity greater than 20% with an allowance of 30% for one 6-minute period per hour	Zero Voltage or Fault	
III. Performance Criteria			
Data Representativeness – **Detector Location**	Boiler exhaust stack downstream of the ESP	Individual Voltage field controllers	
Data Representativeness – **Sensor Specs (a) Range**	0-100% Opacity	0 – 50K Volts	
Data Representativeness – **(b) Accuracy**	± 1% opacity		
Data Representativeness – **Acquisition Procedure**	Electronic data file via data acquisition system – sampling and analysis at least for each successive 10-second period and one cycles of data recording for each successive 6-minute period	Field controllers continuously monitor field voltage readings. When the field controller detects a fault with a field, an alarm is initiated on the Operator's console through the Distributive Control System (DCS).	
Data Representativeness – **Data Recording System**	PI data historian	Operator will record DCS alarm times, cause and corrective actions for any ESP faults in an event log.	
QA/QC Practices and Criteria	Per Site QA/QC Plan	Once / Week Basic Care Route	Run diagnostics / inspect rappers, check instantaneous field voltages, check oxygen concentration, inspect blowers, check TR (transformer rectifier) operation
Data Collection Procedures	Visible emission measurements will be taken in at least every ten-second intervals; average value for each one-minute period is recorded. The one-minute values are averaged over a six-minute period to assess compliance with the indicator range	Continuous Scan	
Averaging period	6 minutes		

Emission Unit	**No. 7 Power Boiler** Emission Unit : PWR03 Emission Point: PWRSV02 Control Device: PWRCD08/02
Description	543 MMBtu/hr boiler
Control Device	Multiclones and ESP
Applicable Requirement	9 VAC 5-40-900A, 9 VAC 5-40-910D
Regulated Pollutant	Particulate matter
Emission Limit	0.172 lb/MMBtu, 81.5 lb/hr

I. CAM Indicator		Visible Emissions (Opacity)	Electrostatic Precipitator Field Voltage	Electrostatic Precipitator Basic Care Inspection
	Measurement Approach	Continuous opacity monitoring system	Continuous monitoring by Distributive Control System (DCS)	
	Monitoring Frequency	Continuous	Continuous	Weekly Inspection
	Justification	Visible emissions in excess of allowable levels are indicative of control device malfunction	Field fault alarms are an indication of control device malfunction	Any deviations noted from detailed checklist / diagnostic test are an indication of control device malfunction
II. Indicator Range		Opacity greater than 20% with an allowance of 60% for one 6-minute period per hour	Zero Voltage or Fault	
III. Performance Criteria				
Data Representativeness	Detector Location	Boiler exhaust stack downstream of the ESP	Individual Voltage field controllers	
	Sensor Specs (a) Range	0-100% Opacity	0 – 50K Volts	
	(b) Accuracy	± 1% opacity		
	Acquisition Procedure	Electronic data file via data acquisition system – sampling and analysis at least for each successive 10-second period and one cycles of data recording for each successive 6-minute period	Field controllers continuously monitor field voltage readings. When the field controller detects a fault with a field, an alarm is initiated on the Operator's console through the Distributive Control System (DCS).	
	Data Recording System	PI data historian	Operator will record DCS alarm times, cause and corrective actions for any ESP faults in an event log.	
QA/QC Practices and Criteria		Per Site QA/QC Plan	Once / Week Basic Care Route	Run diagnostics / inspect rappers, check instantaneous field voltages, check oxygen concentration, inspect blowers, check TR (transformer rectifier) operation
Data Collection Procedures		Visible emission measurements will be taken in at least every ten-second intervals; average value for each one-minute period is recorded. The one-minute values are averaged over a six-minute period to assess compliance with the indicator range	Continuous Scan	
Averaging period		6 minutes		

(9 VAC 5-80-110E and 40 CFR 64)

8. Any failure of the ESP equipment shall be recorded in an event log. For all equipment failures that cannot be repaired the same day, best efforts shall be made to repair the element no later than the next available unit outage appropriate to the repair task. The log shall also include a history of the actions taken to correct the problem and restore the equipment back to operation.
(9 VAC 5-80-110E)

9. The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9.
(9 VAC 5-80-110E and 40 CFR 64.6(c))

10. At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment, except as specified in the QA/QC Plan for

equipment that is subject to an extended temporary shutdown.
(9 VAC 5-80-110E and 40 CFR 64.7(b))

11. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that each power boiler is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions.
(9 VAC 5-80-110E and 40 CFR 64.7(c))

12. Upon detecting an excursion or exceedance, the permittee shall restore operation of the affected power boiler (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable.
(9 VAC 5-80-110E and 40 CFR 64.7(d)(1))

13. Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
(9 VAC 5-80-110E and 40 CFR 64.7(d)(2))

14. If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Department and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
(9 VAC 5-80-110E and 40 CFR 64.7(e))

15. If the accumulation of exceedances or excursions exceeds 5% duration of the operating time for each Power Boiler's ESP opacity monitoring system for a semiannual reporting period, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:

    a. Improved preventative maintenance practices;

    b. Process operation changes;

c. Appropriate improvements to control methods;

d. Other steps appropriate to correct control performance; and

e. More frequent or improved monitoring.

(9 VAC 5-80-110 E and 40 CFR 64.8(a) and (b))

C. Recordkeeping and Reporting

1. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Department. These records shall include, but are not limited to:

   a. For each NO_x, CO and SO_2 CEMS on No. 5, No. 6 & No. 7 power boilers, the permittee shall maintain all required QA/QC records and make these records available upon request or inspection.

   b. Results of all stack tests, visible emission evaluations and performance evaluations.

   c. Continuous monitoring system data, calibrations and calibration checks, percent operating time, and excess emissions;

   d. Scheduled and unscheduled maintenance and operator training.

   These records shall be available at the facility for inspection by the Department and shall be current for the most recent 5 years.
   (9 VAC 5-80-110 and Condition VII.F.3 of the 8/12/09 FESOP)

2. The permittee shall furnish written reports to the Department of excess emissions from any process monitored by a continuous monitoring system (COMS (PWR01, 02, 03 and 05)/CEMS (PWR05)) on a quarterly basis (or semi-annual basis if applicable see Regulations 9 VAC 5-40-50 and 9 VAC 5-50-50), postmarked no later than the 30th day following the end of the calendar quarter. These reports shall include, but are not limited to the following information:

   a. The magnitude of excess emissions, any conversion factors used in the calculation of excess emissions, the date and time of commencement and completion of each period of excess emissions and, the process operating time during the reporting period;

   b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the process, the nature and cause of the malfunction (if known), the corrective action taken or preventative measures adopted;

   c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and

d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in that report.
(9 VAC 5-40-50C and 9 VAC 5-80-110)

3. The permittee shall perform reporting and recordkeeping for No. 9 Power boiler (PWR05) in accordance with all the applicable requirements of 40 CFR Part 60, Subpart GG.
(9 VAC 5-80-110)

D. Testing

The permittee shall perform an acceptable stack test once each permit term on each Power Boiler No. 5, No. 6 and No. 7 (PWR01, 02 and 03) to prove compliance with the particulate emission standard.
(9 VAC 5-80-110)

XI. Miscellaneous Process Areas

The emission units associated with this section of the permit are the following:

Unit ID	Emission Unit Description	Unit ID	Emission Unit Description
MIS01	Paved Roads	MIS04	Waste Paper Baler
MIS02	Unpaved roads	MIS09	Multiple No. 2 Fuel Oil Combustion Emission Units
MIS03	Refrigeration systems	MIS10	Miscellaneous Liquid Storage Tank

A. Limitations

1. No visible emissions shall be detected from the sheet plant waste paper baler (MIS04). (9 VAC 5-50-80 and 9 VAC 5-80-110)
2. The storage tank (MISC10: Miscellaneous Liquid Storage Tank) may be subject to 40 CFR 60, Subpart Kb if the VOC liquid stored in it has a maximum true vapor pressure $\geq$ 3.5 kPa. The permittee is authorized to store any liquid as long as the maximum true vapor pressure does not equal or exceed 3.5 kPa. If a VOC liquid with a maximum true vapor pressure $\geq$ 3.5 kPa will be stored, the permittee will notify the Department in writing within 10 days of material transfer into tank and keep the necessary records to meet Subpart Kb. (9 VAC 5-80-110)

B. Monitoring

Quarterly, when in operation, a visual emission check of the waste paper baler (MIS04) shall be observed by the permittee for a period of not less than one minute for the presence of visible emissions. If visible emissions are observed, the permittee shall perform corrective actions to eliminate the cause of the visible emissions. (9 VAC 5-80-110E)

C. Recordkeeping

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Department. These records shall include, but are not limited to:

a. The dimensions of the storage tank (MISC10: Miscellaneous Liquid Storage Tank) and an analysis showing the capacity of the storage vessel. These records shall be kept for the life of the storage vessel.

b. For the waste paper baler (MIS04), the permittee shall maintain a log of the date, time, location, name of person performing the observation, whether or not visible emissions were detected, and any corrective actions taken, if necessary. These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-110E)

XII. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
WDY03	Log unloading	9 VAC 5-80-720 B	PM-10	
WDY04	Log pile	9 VAC 5-80-720 B	PM-10	
WDY05	Log loading- log pile to slasher	9 VAC 5-80-720 B	PM-10	
WDY07	Short log transport- slasher/debarker/chipper	9 VAC 5-80-720 B	PM-10	
WDY09	Chip transport - chippers to pile	9 VAC 5-80-720 B	PM-10	
WDY10	Chip transport - purchased chips and saw dust to pile	9 VAC 5-80-720 B	PM-10	
WDY11	Bark transport - debarker to power plant	9 VAC 5-80-720 B	PM-10	
WDY12	Chip piles	9 VAC 5-80-720 B	PM-10	
WDY13	Chip loading- trucks to chip pit	9 VAC 5-80-720 B	PM-10	
WDY15	Chip reclaiming - chip pile screening/rechipping	9 VAC 5-80-720 B	PM-10	
WDY17	Chip transport - screens to silos	9 VAC 5-80-720 B	PM-10	
WDY18	Fuel transport - fuel pile to power plant	9 VAC 5-80-720 B	PM-10	
WDY19	Chip transport - silos to digester	9 VAC 5-80-720 B	PM-10	
UPM22	K1 Chip cyclone	9 VAC 5-80-720 B	PM-10	
UPM23	K2 Chip cyclone	9 VAC 5-80-720 B	PM-10	
UPM24	310 Chip conveyor	9 VAC 5-80-720 B	PM-10	
UPM25	Batch digester chip bin system	9 VAC 5-80-720 B	PM-10	
CRE14	Soap storage	9 VAC 5-80-720 B	TRS,VOC	
BLP10	Chemical Unloading station	9 VAC 5-80-720 B	VOC	
PRM08	Cook Room	9 VAC 5-80-720 B	VOC	
PRM12	Lube oil storage tank	9 VAC 5-80-720 B	VOC	
PWR06	Wood fuel handling	9 VAC 5-80-720 B	PM-10	1600+ tons per day
PWR07	Coal handling (related to PWR 01, 02, 03)	9 VAC 5-80-720 B	PM-10	
PWR08	Ash Handling (related to PWR 01, 02, 03)	9 VAC 5-80-720 B	PM-10	
PWR09	Lube oil systems	9 VAC 5-80-720 B	VOC	
PWR10	Oil storage	9 VAC 5-80-720 B	VOC	
WWT04	pH adjustment and TRS control	9 VAC 5-80-720 B	H_2S, TRS	0.92×10^6 gpd
FRP01	Fiber recycling plant	9 VAC 5-80-720 B	VOC	
MIS05	Maintenance parts washer	9 VAC 5-80-720 B	VOC	
MIS06	Gasoline storage tank	9 VAC 5-80-720 B	VOC	
MIS07	Log Storage Yard	9 VAC 5-80-720 B	PM-10	

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
PWR13	Remote Wood Fuel Storage and Handling	9 VAC 5-80-720 B	PM-10	

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, monitoring, recordkeeping and reporting shall not be required for these emission units in accordance with 9 VAC 5-80-490 C, E, and F.

XIII. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Non Applicability
9 VAC 5 Chapter 40 Article 15	Coal preparations	Mill does not perform any of the applicable coal prep activities
9 VAC 5 Chapter 40 Article 22	Sulfur Recovery Operations	The RTO sulfur scrubber was installed after the applicability date of Chapter 40.
9 VAC 5 Chapter 40 Article 31	Paper and Fabric Coating Application Systems	This facility is not in a VOC control area specified by this article.
9 VAC 5 Chapter 40 Article 37	Petroleum Liquid Storage and Transfer Operations	Fuel oil is specifically exempted from applicability. The gasoline storage tanks at the mill are less than the 40,000 gallon applicability threshold.
9 VAC 5 Chapter 40 Article 40	Open Burning	The facility does not conduct open burning.
9 VAC 5 Chapter 40 Article 43	Municipal Solid Waste Landfills	The mill landfills do not qualify as municipal landfills.
9 VAC 5 Chapter 40 Article 47	Solvent Cleaning	This article only applies to Northern Virginia VOC control area.
9 VAC 5 Chapter 40 Article 51	Case-by-Case RACT Determinations	The facility is not in a control area specified by this article
9 VAC 5 Chapter 80 Article 3	Federal Operating Permits for Acid Rain Sources	Not an acid rain source
9 VAC 5 Chapter 140 Articles 11-19	NO_x Annual Trading Program	The facility does not produce electricity for sale.
9 VAC 5 Chapter 140 Articles 21-29	NO_x Ozone Season Trading Program	The facility does not produce electricity for sale.
9 VAC 5 Chapter 140 Articles 31-39	SO_2 Annual Trading Program	The facility does not produce electricity for sale.
40 CFR 60 Subpart D	Fossil-Fuel-Fired Steam Generators For Which Construction Is Commenced After August 17, 1971	The power boilers construction predates the applicability date of this subpart and the units have not been modified or reconstructed in a fashion that would have triggered applicability after initial construction
40 CFR 60 Subpart Da	Electric Utility Steam Generating Units For Which Construction Is Commenced After September 18, 1978	The power boilers construction predates the applicability date of this subpart. The facility is not subject to this subpart because it does not supply for sale more than one-third of its potential electric output and/or more than 25 MW to any utility distribution system.

Citation	Title of Citation	Description of Non Applicability
40 CFR 60 Subpart Dc	Small Industrial-Commercial-Institutional Steam Generating Units	All potentially affected units have heat inputs greater than 100 mmBtu/hr.
40 CFR 60 Subpart E	Incinerators	The boilers and furnaces do not combust solid waste as defined by 40 CFR 60.51(b)
40 CFR 60 Subpart K	Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, And Prior To May 19, 1978	There are no storage vessels on site applicable to this regulation
40 CFR 60 Subpart Ka	Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, And Prior To July 23, 1984	There are no storage vessels on site applicable to this regulation.
40 CFR 60 Subpart O	Sewage Treatment Plants	This facility does not meet definition of applicability.
40 CFR 60 Subpart HH	Lime Manufacturing Plants	This facility is not subject to this subpart because lime manufacturing associated with pulp and paper making operations is specifically exempted by 40 CFR 60.340(b).
40 CFR 60 Subpart KKKK	Stationary Combustion Turbines	PWR05 was constructed before the applicability date and is applicable to subpart GG.
40 CFR 60 Subpart Y	New Source Performance Standards for Coal Preparation Plants	Mill does not perform any of the applicable coal prep activities
40 CFR 61 Subpart E	Mercury	This facility does not dry wastewater treatment sludge by direct contact with combustion gases.
40 CFR 61 Subpart I	Radionuclide Emissions From Facilities Licensed By The Nuclear Regulatory Commission And Federal Facilities Not Covered By Subpart H.	All radionuclides at source are in sealed sources.
40 CFR 61 Subpart J	Equipment Leaks (Fugitive Emission Source) Of Benzene	Equipment at the mill is not in contact with material containing benzene greater than or equal to 10% by weight.
40 CFR 61 Subpart V	Equipment Leaks (Fugitive Emission Source	Equipment at the mill is not in contact with material containing benzene or vinyl chloride greater than or equal to 10% by weight.
40 CFR 63 Subpart Q	Industrial Process Cooling Towers	Facility does not use Chromium containing compounds in its cooling towers

Citation	Title of Citation	Description of Non Applicability
40 CFR 63 Subpart T	Degreasing Organic Cleaners (Halogenated Solvent Cleaning)	Facility does not use and of the specified compounds in its solvent baths.
40 CFR 63 Subpart TT	Equipment Leaks - Control Level 1	No applicable MACT references this subpart.
40 CFR 63 Subpart UU	Equipment Leaks - Control Level 2	No applicable MACT references this subpart.
40 CFR 63 Subpart JJJJ	Paper and Other Web Coatings (paper, plastic, film, foil, etc.)	Definition of 'coating materials' does not include materials used to form a substrate. Clays, starch and other filler materials applied at the paper machines are used to form the substrate (paper) product.
40 CFR 63 Subpart ZZZZ	Reciprocating Internal Combustion Engines (RICE)	There are no RICE engines at this facility.
40 CFR 63 Subpart AAAAA	Lime Manufacturing	Facility is specifically exempted from this subpart by 40 CFR 63.7081(a).
40 CFR 63 Subpart GGGGGG	Primary Nonferrous Metals Area Sources - Zinc, Cadmium and Beryllium	Facility is not a primary metal production facility.
40 CFR 72	Permits Regulation	Applies only to affected units under the federal acid rain control permit program
40 CFR 73	Sulfur Dioxide Allowance Systems	Only applies to electric utility sources in the federal acid rain control program
40 CFR 74	Sulfur Dioxide Opt-Ins	Only applies to industrial sources that have chosen to become part of the federal acid rain program
40 CFR 76	Acid Rain Nitrogen Oxides Emission Reduction Program	Only applies to sources in the federal acid rain control program

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.
(9 VAC 5-80-500)

XIV. General Conditions

A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.
(9 VAC 5-80-490N)

B. Permit Expiration

1. This permit has a fixed term of five years. The expiration date shall be the date five years from the effective date of the permit. Unless the owner submits a timely and complete renewal application to DEQ consistent with 9 VAC 5-80-430, the right of the facility to operate shall terminate upon permit expiration.

   a. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.

   b. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 3, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-510.

   c. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-430 for a renewal permit, except in compliance with a permit issued under Article 3, Part II of 9 VAC 5 Chapter 80.

   d. If an applicant submits a timely and complete application under section 9 VAC 5-80-430 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-500 , shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.

   e. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-430 shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-430D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

   (9 VAC 5-80-430B, C and F, 9 VAC 5-80-490D and 9 VAC 5-80-530B)

C. Recordkeeping and Reporting

1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:

   a. The date, place as defined in the permit, and time of sampling or measurements.

   b. The date(s) analyses were performed.

   c. The company or entity that performed the analyses.

   d. The analytical techniques or methods used.

   e. The results of such analyses.

f. The operating conditions existing at the time of sampling or measurement.

(9 VAC 5-80-490F)

2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
(9 VAC 5-80-490F)

3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than **March 1** and **September 1** of each calendar year. This report shall be signed by a responsible official, consistent with 9 VAC 5-80-430G and shall include:

   a. The time period included in the report. The time periods to be addressed are January 1 to June 30 inclusive and July 1 to December 31 inclusive.

   b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:

      i Exceedance of emissions limitations or operational restrictions,

      ii Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,

      iii Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

   c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period." The time period included in the report.

   (9 VAC 5-80-490F)

D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than **March 1** each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a) (3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with VAC 5-80-430 G, and shall include:

a. The time period included in the certification. The time period to be addressed is January 1 to December 31.

b. The identification of each term or condition of the permit that is the basis of the certification.

c. The compliance status

d. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.

e. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.

f. Such other facts as the permit may require to determine the compliance status of the source.

One copy of the annual compliance certification shall be sent to EPA at the following address:

Clean Air Act Title V Compliance Certification (3AP00)
U.S. Environmental Protection Agency, Region III
1650 Arch Street
Philadelphia, PA 19103-2029.

(9 VAC 5-80-110K.5)

E. Permit Deviation Reporting

The permittee shall notify the Department within four daytime business hours, after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition IX.C.3. of this permit.
(9 VAC 5-80-110F.2)

F. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after discovery, notify the Department by fax, e-mail or telephone of such failure or malfunction and shall within 14-days provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Department.
(9 VAC 5-20-180C)

1. The emission units that have continuous monitors subject to 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not subject to the two week written notification.
2. The emission units subject to the reporting and the procedure requirements of 9 VAC 5-40-50 C and the procedures of 9 VAC 5-50-50 C are listed below:
   a. PWR01 - No. 5 Power Boiler
   b. PWR02 - No. 6 Power Boiler
   c. PWR03 - No. 7 Power Boiler
   d. PWR05 - Combustion Turbine
   e. CAU01 - No. 2 Lime Kiln
   f. CAU02 - No. 3 Lime Kiln
   g. CAU03 - No. 4 Lime Kiln
   h. CRE01 - No. 4 Recovery Boiler
   i. CRE02 - No. 5 Recovery Boiler
   j. CRE03 - No. 6 Recovery Boiler

3. Each owner required to install a continuous monitoring system subject to 9 VAC 5-40-41 or 9 VAC 5-50-410 shall submit a written report of excess emissions (as defined in the applicable emission standard) to the board for every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter and shall include the following information:

   a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h) or 9 VAC 5-40-41B.6, any conversion factors used, and the date and time of commencement and completion of each period of excess emissions;

   b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the source. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted;

   c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and

   d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in the report.

4. All emission units not subject to 9 VAC 5-40-50C and 9 VAC 5-50-50C shall make written reports within 14 days of the malfunction occurrence.

5. Emission units which are covered in the SSM Plan of 40 CFR Part 63, Subpart S or Subpart MM are not required to provide the written statement prescribed in this paragraph.

(9 VAC 5-20-180C, 9 VAC 5-40-50 and 9 VAC 5-50-50)

G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.
(9 VAC 5-80-490G.1)

H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
(9 VAC 5-80-490G.2)

I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
(9 VAC 5-80-490G.3)

J. Permit Modification

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1790, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.
(9 VAC 5-80-490G and L, 9 VAC 5-80-550 and 9 VAC 5-80-660)

K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege.
(9 VAC 5-80-490G.5)

L. Duty to Submit Information

1. The permittee shall furnish to the board, within a reasonable time, any information that the board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the board along with a claim of confidentiality.
(9 VAC 5-80-490G.6)

2. Any document (including reports) required in a permit condition to be submitted to the board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-430G.9.
(9 VAC 5-80-490K.1)

M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-360 through 9 VAC 5-80-700 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 et seq. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.
(9 VAC 5-80-490H)

N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited, to the following:

1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;

2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;

3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;

4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and

5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-40-20E, 9 VAC 5-50-90 and 9 VAC 5-50-50)

O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
(9 VAC 5-40-20E and 9 VAC 5-50-20E)

P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-500 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80 Article 3.
(9 VAC 5-80-490J)

Q. Inspection and Entry Requirements

The permittee shall allow the Department, upon presentation of credentials and other documents as may be required by law, to perform the following:

1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records shall be kept under the terms and conditions of the permit.
2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-490K.2)

R. Reopening For Cause

The permit shall be reopened by the board if additional federal requirements become applicable to a major source with a remaining permit term of three or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-430F.

1. The permit shall be reopened if the board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

2. The permit shall be reopened if the administrator or the board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
3. The permit shall not be reopened by the board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-490D.

(9 VAC 5-80-490L)

S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to Department upon request. (9 VAC 5-80-510G)

T. Transfer of Permits

1. No person shall transfer a permit from one location to another or from one piece of equipment to another. (9 VAC 5-80-520)
2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-560. (9 VAC 5-80-520)
3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-560. (9 VAC 5-80-520)

U. Malfunction as an Affirmative Defense

1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.
2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
   a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
   b. The permitted facility was at the time being properly operated.
   c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
   d. The permittee notified the board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-490F.2.b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180C.
3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any requirement applicable to the source.

4. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.
(9 VAC 5-80-650)

V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 3. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any of the grounds for revocation or termination or for any other violations of these regulations.
(9 VAC 5-80-490G & L, 9 VAC 5-80-640 and 9 VAC 5-80-660)

W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submits such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.
(9 VAC 5-80-430E)

X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substance subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.
(40 CFR Part 82, Subparts A - F)

Y. Asbestos Requirements

The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).
(9 VAC 5-60-70 and 9 VAC 5-80-490A)

Z. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.
(40 CFR Part 68)

AA. Changes to Permits for Emissions Trading

No permit revision shall be required, under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.
(9 VAC 5-80-490I)

BB. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

1. All terms and conditions required under 9 VAC 5-80-490 except subsection N shall be included to determine compliance.
2. The permit shield described in 9 VAC 5-80-500 shall extend to all terms and conditions that allow such increases and decreases in emissions.
3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-360 through 9 VAC 5-80-700.

(9 VAC 5-80-490I)

XV. Clean Air Interstate Rule (CAIR) Permit

The permittee shall comply with all applicable CAIR requirements (9 VAC 5-140-1010 *et seq.*, 9 VAC 5-140-2010 *et seq.*, 9 VAC 5-140-3010 *et seq.*, and 40 CFR Part 96) by the compliance date in the respective Part of 9 VAC 5 Chapter 140, as contained in the CAIR Permit. The CAIR Permit is Appendix C to this document and expires upon expiration of this Title V Permit.
(9 VAC 5-80-490, 40 CFR Part 96 and 9 VAC 5 Chapter 140)

XVI. State-Only Enforceable Requirements

The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9 VAC 5-80-690 concerning review of proposed permits by EPA and draft permits by affected states.

1. Odor - 9 VAC 5 Chapter 40, Article 2 and 9 VAC 5 Chapter 50, Article 2.
2. State toxics rule - 9 VAC 5 Chapter 60, Articles 4 and 5.

(9 VAC 5-80-110 and 9 VAC 5-80-700)

XVII. Appendix A - Subpart S Parity Equipment

Emission Unit	Emission Unit ID	Controlled Under Base Case	Controlled Under Parity	Comment
A & B Washer System				
A Washer 1	UPM03	yes	no	*Under IP Franklin's alternative 40 CFR 63.443 compliance approach the emissions from this equipment will not be collected and controlled.*
A Washer 2	UPM03	yes	no	
A Washer 3	UPM03	yes	no	
B Washer 1	UPM04	yes	no	
B Washer 2	UPM04	yes	no	
B Washer 3	UPM04	yes	no	
7 Low Density Storage Tank	UPM18	yes	no	
D Decker	UPM12	yes	no	
D Decker Filtrate Tank	UPM12	yes	no	
40 High Density Storage Tank	BLP06	yes	no	
C Washer system				
C Washer 2	UPM05	yes	no	*Under IP Franklin's alternative 40 CFR 63.443 compliance approach the emissions from this equipment will not be collected and controlled.*
C Washer 3	UPM05	yes	no	
C3 Washer Filtrate Tank	UPM05	yes	no	
E Decker	UPM13	no	no	*Emissions from the E-Decker are not required to be controlled since the methanol content of the shower water used on this system was tested and found to be less than the threshold specified in 40 CFR 63.443(a)(1)(iv)(B).*
E Decker Filtrate Tank	UPM13	no	no	
D Washer System				
D Washer	UPM06	yes	yes	
D Accepts Tank	UPM06	yes	yes	
D Washer Seal (Filtrate) Tank	UPM06	yes	no	*Under IP Franklin's alternative 40 CFR 63.443 compliance approach the emissions from this equipment will not be collected and controlled.*
B Decker	UPM11	yes	yes	
B Decker Filtrate Tank	UPM11	yes	yes	
1 High Density Storage Tank	BLP06	yes	yes	
Shared Washroom Sources				
Vertical Foam Tank	UPM21	yes	no	*Under IP Franklin's alternative 40 CFR 63.443compliance approach the emissions from this equipment will not be collected and controlled.*
Knotters and Screens				
A Knotter	UPM14	no	no	*The knotters and screens are not required to be controlled under either the base case or parity because they were tested and found to have*
A Noss Screens	UPM07	no	no	
B Knotter	UPM15	no	no	

Emission Unit	Emission Unit ID	Controlled Under Base Case	Controlled Under Parity	Comment
B Noss Screens	UPM08	no	no	*HAP concentration below the threshold specified in 40 CFR 63.443(a)(1)(ii).*
C Wash Line Open Knotters	UPM16	no	no	
C Wash Line Cowan Screens	UPM09	no	no	
D Wash Line Open Knotters	UPM17	no	no	
D Wash Line KMW Screens	UPM10	no	no	
E Bleach Line				
E Pressate Hold Tank	BLP04	yes	no	*Under IP Franklin's alternative 40 CFR 63.443 compliance approach the emissions from this equipment will not be collected and controlled.*
E O2-1 Filtrate Tank	BLP04	yes	yes	
E O2-2 Filtrate Tank	BLP04	yes	yes	
E East and West Twin Roll Press	BLP04	yes	yes	
E O2 Reactor	BLP04	yes	no	*Under IP Franklin's alternative 40 CFR 63.443 compliance approach the emissions from this equipment will not be collected and controlled.*
E O2 Blow Tank	BLP04	yes	yes	
E O2 Blend Chest	BLP04	yes	yes	
E O2 Pressate Level Tank	BLP04	yes	yes	
F Bleach Line				
F Pre-O2 Blend Chest	BLP05	yes	no	*Under IP Franklin's alternative 40 CFR 63.443 compliance approach the emissions from this equipment will not be collected and controlled.*
F O2 Reactor	BLP05	yes	no	
F Pre-O2 Pressate Tank	BLP05	yes	no	
F O2-1 Pressate Tank	BLP05	yes	no	
F O2-2 Pressate Tank	BLP05	yes	no	
F O2 Blow Tank	BLP05	yes	no	
F Pre O2, O2-1 and O2-2 Presses	BLP05	yes	no	
Collection System Condensates				
Base Case collection system condensates		yes	no	*Vents left uncontrolled will not be condensed and treated. Under parity, the BLOX tank vents will be condensed and the condensates sent in a closed collection system for treatment in a steam stripper.*
Parity case collection system condensates		no	yes	
Black Liquor Oxidation (BLOX) System				
No. 1 BLOX Tank	CRE17	no	yes	*IP Franklin will control these alternative sources that are not required to be controlled under the MACT 1, Phase 2 base case regulation*
No. 2 BLOX Tank	CRE17	no	yes	
No. 3 BLOX Tank	CRE17	no	yes	
No. 4 BLOX Tank	CRE17	no	yes	

XVIII. Appendix B - Subpart S LVHC Gas and Condensate Streams Collected

Subpart S – LVHC Gas Collection

The following sources are collected to meet the LVHC gas control requirements of 40 CFR 63.443(a)(1)(i):

1. Digester Systems
   - a. Batch Digesters Systems — ID: UPM01
   - b. K1 Continuous Digester System — ID: UPM02
   - c. K2 Continuous Digester System — ID: UPM02
   - d. Kamyr Chip Bins for K1& K2 — ID: UPM19
   - e. Pulping Process Condensate Collection Tank (BOD Tank) — ID: UPM30
2. Turpentine Recovery System
   - a. Decanter Underflow Tank — ID: UPM20
   - b. Decanter — ID: UPM20
   - c. No.1&2 Storage tanks — ID: UPM20
3. Evaporator System
   - a. D Set Evaporator & Hotwell — ID: CRE07
   - b. E Set Evaporator & Hotwell — ID: CRE08
   - c. F Set Evaporator & Hotwell — ID: CRE09
   - d. G Set Evaporator & Condensate Tank — ID: CRE10
   - e. Condensate (Steam) Stripper and Feed Tank — ID: CRE16
4. LVHC Collection System (Condensate Drains)
   - a. LVHC Collection System Drains — ID: CRE18
     - i G Set Low Pressure Condensate Tank
     - ii T-1 Condensate Tank
     - iii T-2 Condensate Tank
   - b. Condensate (Steam) Stripper Off Gas System Drains — ID: CRE19
     - i No. 1 Condensate Pot
     - ii No. 2 Condensate Pot
     - iii No. 3 Condensate Pot

Subpart S – LVHC Condensate Streams Collected

The following condensate streams are collected to meet the collection requirement of at least 65% of total HAP mass available from regulated equipment systems plus the LVHC collection system condensate drains consistent with the requirements of 40 CFR 63.446(c)(2):

5. Digester System
    a. Blow Heat Accumulator Primary Condenser — ID: UPM01
    b. Blow Heat Accumulator Secondary Condenser — ID: UPM01
    c. Kamyr Condensers From K1 And K2 Digester — ID: UPM02
    d. Kamyr Chip Bin Separator Condenser (K1, K2) — ID: UPM19
6. Turpentine Recovery System
    a. Decanter Underflow — ID: UPM20
7. Evaporator System
    a. D-Set Evaporator Hotwell — ID: CRE07
    b. E-Set Evaporator Hotwell — ID: CRE08
    c. F-Set Evaporator Hotwell — ID: CRE09
    d. G Set Foul Condensate Tank — ID: CRE10
8. LVHC Collection System (condensate drains)
    a. LVHC Collection System — ID: CRE18
        i G Set low pressure condensate tank
        ii T-1 condensate tank
        iii T-2 condensate tank
    b. Condensate (Steam) Stripper off gas system — ID: CRE19
        i No. 1 condensate pot
        ii No. 2 condensate pot
        iii No. 3 condensate pot

XIX. Appendix C - CAIR Permit

CAIR Permit Application
(for sources covered under a CAIR SIP)

Page 1

For more information, refer to 40 CFR 96.121, 96.122, 96.221, 96.222, 96.321, and 96.322

This submission is: ☒ New ☐ Revised

STEP 1
Identify the source by plant name, State, and ORIS or facility code

Plant Name: International Paper, Franklin Mill State: Virginia ORIS/Facility Code: 52152

STEP 2
Enter the unit ID# for each CAIR unit and indicate to which CAIR programs each unit is subject (by placing an "X" in the column)

Unit ID#	NO_x Annual	SO_2	NO_x Ozone Season
003			X
029			X

STEP 3
Read the standard requirements and the certification, enter the name of the CAIR designated representative, and sign and date

Standard Requirements

(a) Permit Requirements.

(1) The CAIR designated representative of each CAIR NO_x source, CAIR SO_2 source, and CAIR NO_x Ozone Season source (as applicable) required to have a title V operating permit and each CAIR NO_x unit, CAIR SO_2 unit, and CAIR NO_x Ozone Season unit (as applicable) required to have a title V operating permit at the source shall:

(i) Submit to the permitting authority a complete CAIR permit application under §96.122, §96.222, and §96.322 (as applicable) in accordance with the deadlines specified in §96.121, §96.221, and §96.321 (as applicable); and

(ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review a CAIR permit application and issue or deny a CAIR permit.

(2) The owners and operators of each CAIR NO_x source, CAIR SO_2 source, and CAIR NO_x Ozone Season source (as applicable) required to have a title V operating permit and each CAIR NO_x unit, CAIR SO_2 unit, and CAIR NO_x Ozone Season unit (as applicable) required to have a title V operating permit at the source shall have a CAIR permit issued by the permitting authority under subpart CC, CCC, and CCCC (as applicable) of 40 CFR part 96 for the source and operate the source and the unit in compliance with such CAIR permit.

(3) Except as provided in subpart II, III, and IIII (as applicable) of 40 CFR part 96, the owners and operators of a CAIR NO_x source, CAIR SO_2 source, and CAIR NO_x Ozone Season source (as applicable) that is not otherwise required to have a title V operating permit and each CAIR NO_x unit, CAIR SO_2 unit, and CAIR NO_x Ozone Season unit (as applicable) that is not otherwise required to have a title V operating permit are not required to submit a CAIR permit application, and to have a CAIR permit, under subpart CC, CCC, and CCCC (as applicable) of 40 CFR part 96 for such CAIR NO_x source, CAIR SO_2 source, and CAIR NO_x Ozone Season source (as applicable) and such CAIR NO_x unit, CAIR SO_2 unit, and CAIR NO_x Ozone Season unit (as applicable).

Plant Name: International Paper, Franklin Mill

STEP 3, continued

(3) Monitoring, reporting, and recordkeeping requirements.

(i) The owners and operators, and the CAIR designated representative, of each CAIR NO_x source, CAIR SO_2 source, and CAIR NO_x Ozone Season source (as applicable) and each CAIR NO_x unit, CAIR SO_2 unit, and CAIR NO_x Ozone Season unit (as applicable) at the source shall comply with the monitoring, reporting, and recordkeeping requirements of subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96.

(ii) The emissions measurements recorded and reported in accordance with subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96 shall be used to determine compliance by each CAIR NO_x source, CAIR SO_2 source, and CAIR NO_x Ozone Season source (as applicable) with the CAIR NO_x emissions limitation, CAIR SO_2 emissions limitation, and CAIR NO_x Ozone Season emissions limitation (as applicable) under paragraph (c) of §96.106, §96.206, and §96.306 (as applicable).

(c) Nitrogen oxides emissions requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_x source and each CAIR NO_x unit at the source shall hold, in the source's compliance account, CAIR NO_x allowances available for compliance deductions for the control period under §96.154(a) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_x units at the source, as determined in accordance with subpart HH of 40 CFR part 96.

(2) A CAIR NO_x unit shall be subject to the requirements under paragraph (c)(1) of §96.106 for the control period starting on the later of January 1, 2038 or the deadline for meeting the unit's monitor certification requirements under §96.170(b)(1), (2), or (5) and for each control period thereafter.

(3) A CAIR NO_x allowance shall not be deducted for compliance with the requirements under paragraph (c)(1) of §96.106, for a control period in a calendar year before the year for which the CAIR NO_x allowance was allocated.

(4) CAIR NO_x allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Allowance Tracking System accounts in accordance with subparts FF, GG, and II of 40 CFR part 96.

(5) A CAIR NO_x allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_x Annual Trading Program. No provision of the CAIR NO_x Annual Trading Program, the CAIR permit application, the CAIR permit, or an exemption under §96.105 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.

(6) A CAIR NO_x allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subpart EE, FF, GG, or II of 40 CFR part 96, every allocation, transfer, or deduction of a CAIR NO_x allowance to or from a CAIR NO_x source's compliance account is incorporated automatically in any CAIR permit of the source that includes the CAIR NO_x unit.

Sulfur dioxide emission requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR SO_2 source and each CAIR SO_2 unit at the source shall hold, in the source's compliance account, a tonnage equivalent of CAIR SO_2 allowances available for compliance deductions for the control period under §96.254(a) and (b) not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO_2 units at the source, as determined in accordance with subpart HHH of 40 CFR part 96.

(2) A CAIR SO_2 unit shall be subject to the requirements under paragraph (c)(1) of §96.206 for the control period starting on the later of January 1, 2012 or the deadline for meeting the unit's monitor certification requirements under §96.270(b)(1), (2), or (5) and for each control period thereafter.

(3) A CAIR SO_2 allowance shall not be deducted, for compliance with the requirements under paragraph (c)(1) of §96.206, for a control period in a calendar year before the year for which the CAIR SO_2 allowance was allocated.

(4) CAIR SO_2 allowances shall be held in, deducted from, or transferred into or among CAIR SO_2 Allowance Tracking System accounts in accordance with subparts FFF, GGG, and III of 40 CFR part 96.

(5) A CAIR SO_2 allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO_2 Trading Program. No provision of the CAIR SO_2 Trading Program, the CAIR permit application, the CAIR permit, or an exemption under §96.205 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.

(6) A CAIR SO_2 allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subpart FFF, GGG, or III of 40 CFR part 96, every allocation, transfer, or deduction of a CAIR SO_2 allowance to or from a CAIR SO_2 source's compliance account is incorporated automatically in any CAIR permit of the source that includes the CAIR SO_2 unit.

Nitrogen oxides ozone season emission requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO_x Ozone Season allowances available for compliance deductions for the control period under §96.354(a) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_x Ozone Season units at the source, as determined in accordance with subpart HHHH of 40 CFR part 96.

(2) A CAIR NO_x Ozone Season unit shall be subject to the requirements under paragraph (c)(1) of §96.306 for the control period starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under §96.370(b)(1), (2), (3) or (7) and for each control period thereafter.

(3) A CAIR NO_x Ozone Season allowance shall not be deducted, for compliance with the requirements under paragraph (c)(1) of §96.306, for a control period in a calendar year before the year for which the CAIR NO_x Ozone Season allowance was allocated.

(4) CAIR NO_x Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Ozone Season Allowance Tracking System accounts in accordance with subparts FFFF, GGGG, and IIII of 40 CFR part 96.

(5) A CAIR NO_x allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_x Ozone Season Trading Program. No provision of the CAIR NO_x Ozone Season Trading Program, the CAIR permit application, the CAIR permit, or an exemption under §96.305 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.

(6) A CAIR NO_x allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subpart EEEE, FFFF, GGGG, or IIII of 40 CFR part 96, every allocation, transfer, or deduction of a CAIR NO_x Ozone Season allowance to or from a CAIR NO_x Ozone Season source's compliance account is incorporated automatically in any CAIR permit of the source.

Plant Name: International Paper, Franklin Mill

STEP 3, continued

(d) Excess emissions requirements.

If a CAIR NO_x source emits nitrogen oxides during any control period in excess of the CAIR NO_x emissions limitation, then:

(1) The owners and operators of the source and each CAIR NO_x unit at the source shall surrender the CAIR NO_x allowances required for deduction under §96.154(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law; and

(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart, the Clean Air Act, and applicable State law.

If a CAIR SO_2 source emits sulfur dioxide during any control period in excess of the CAIR SO_2 emissions limitation, then:

(1) The owners and operators of the source and each CAIR SO_2 unit at the source shall surrender the CAIR SO_2 allowances required for deduction under §96.254(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law; and

(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart, the Clean Air Act, and applicable State law.

If a CAIR NO_x Ozone Season source emits nitrogen oxides during any control period in excess of the CAIR NO_x Ozone Season emissions limitation, then:

(1) The owners and operators of the source and each CAIR NO_x Ozone Season unit at the source shall surrender the CAIR NO_x Ozone Season allowances required for deduction under §96.354(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law; and

(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart, the Clean Air Act, and applicable State law.

(e) Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the CAIR NO_x source, CAIR SO_2 source, and CAIR NO_x Ozone Season source (as applicable) and each CAIR NO_x unit, CAIR SO_2 unit, and CAIR NO_x Ozone Season unit (as applicable) at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the permitting authority or the Administrator.

(i) The certificate of representation under §96.113, §96.213, and §96.313 (as applicable) for the CAIR designated representative for the source and each CAIR NO_x unit, CAIR SO_2 unit, and CAIR NO_x Ozone Season unit (as applicable) at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under §96.113, §96.213, and §96.313 (as applicable) changing the CAIR designated representative.

(ii) All emissions monitoring information, in accordance with subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96, provided that to the extent that subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96 provides for a 3-year period for recordkeeping, the 3-year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_x Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_x Ozone Season Trading Program (as applicable).

(iv) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO_x Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_x Ozone Season Trading Program (as applicable) or to demonstrate compliance with the requirements of the CAIR NO_x Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_x Ozone Season Trading Program (as applicable).

(2) The CAIR designated representative of a CAIR NO_x source, CAIR SO_2 source, and CAIR NO_x Ozone Season source (as applicable) and each CAIR NO_x unit, CAIR SO_2 unit, and CAIR NO_x Ozone Season unit (as applicable) at the source shall submit the reports required under the CAIR NO_x Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_x Ozone Season Trading Program (as applicable) including those under subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96.

(f) Liability.

(1) Each CAIR NO_x source, CAIR SO_2 source, and CAIR NO_x Ozone Season source (as applicable) and each NO_x unit, CAIR SO_2 unit, and CAIR NO_x Ozone Season unit (as applicable) shall meet the requirements of the CAIR NO_x Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_x Ozone Season Trading Program (as applicable).

(2) Any provision of the CAIR NO_x Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_x Ozone Season Trading Program (as applicable) that applies to a CAIR NO_x source, CAIR SO_2 source, and CAIR NO_x Ozone Season source (as applicable) or the CAIR designated representative of a CAIR NO_x source, CAIR SO_2 source, and CAIR NO_x Ozone Season source (as applicable) shall also apply to the owners and operators of such source and of the CAIR NO_x units, CAIR SO_2 units, and CAIR NO_x Ozone Season units (as applicable) at the source.

(3) Any provision of the CAIR NO_x Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_x Ozone Season Trading Program (as applicable) that applies to a CAIR NO_x unit, CAIR SO_2 unit, and CAIR NO_x Ozone Season unit (as applicable) or the CAIR designated representative of a CAIR NO_x unit, CAIR SO_2 unit, and CAIR NO_x Ozone Season unit (as applicable) shall also apply to the owners and operators of such unit.

Plant Name: International Paper, Franklin Mill

STEP 3, continued

(g) Effect on Other Authorities

No provision of the CAIR NO_x Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_x Ozone Season Trading Program (as applicable), a CAIR permit application, a CAIR permit, or an exemption under § 96.105, §96.205, and §96.305 (as applicable) shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_x source, CAIR SO_2 source, and CAIR NO_x Ozone Season source (as applicable) or CAIR NO_x unit, CAIR SO_2 unit, and CAIR NO_x Ozone Season unit (as applicable) from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

Certification

I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name: John Rankin

Signature: John Rankin

Date: June 29, 2007